

Figure 1

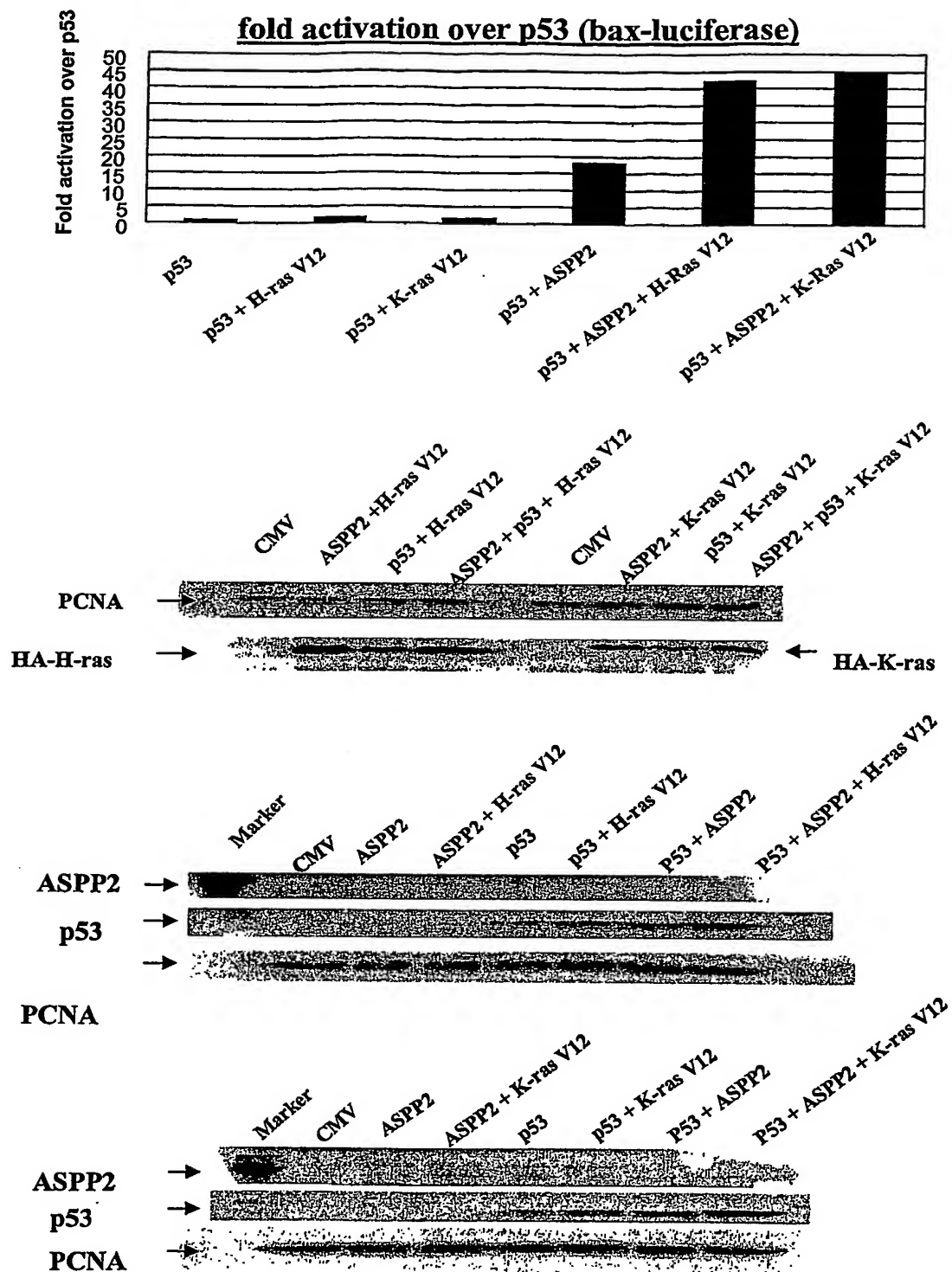
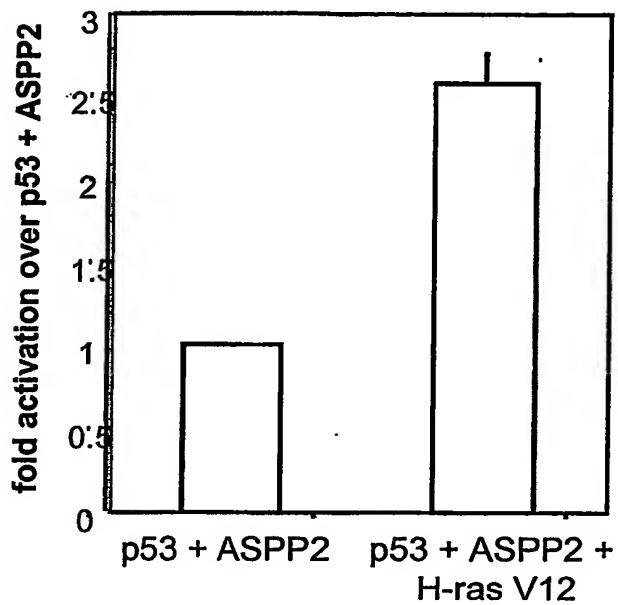


Figure 2

H-ras and K-ras activate ASPP equally

H-rasV12 activation
of p53 & ASPP2 synergy



K-rasV12 activation
of p53 & ASPP2 synergy

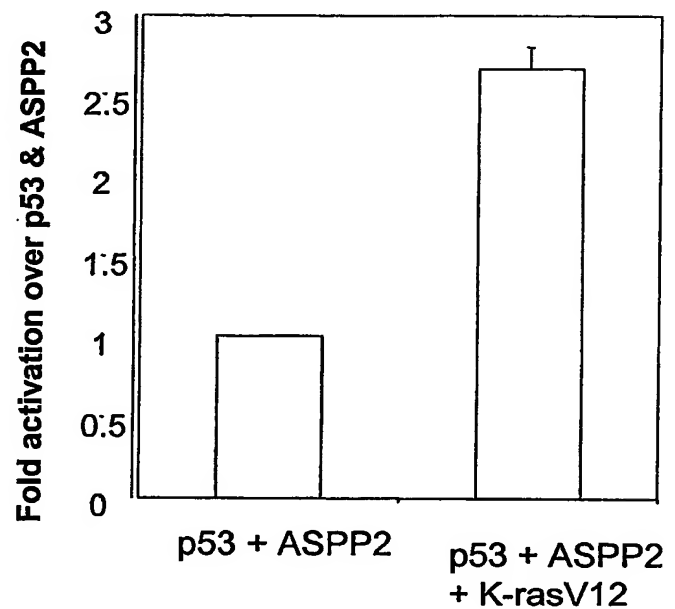


Figure 3

Figure 4A

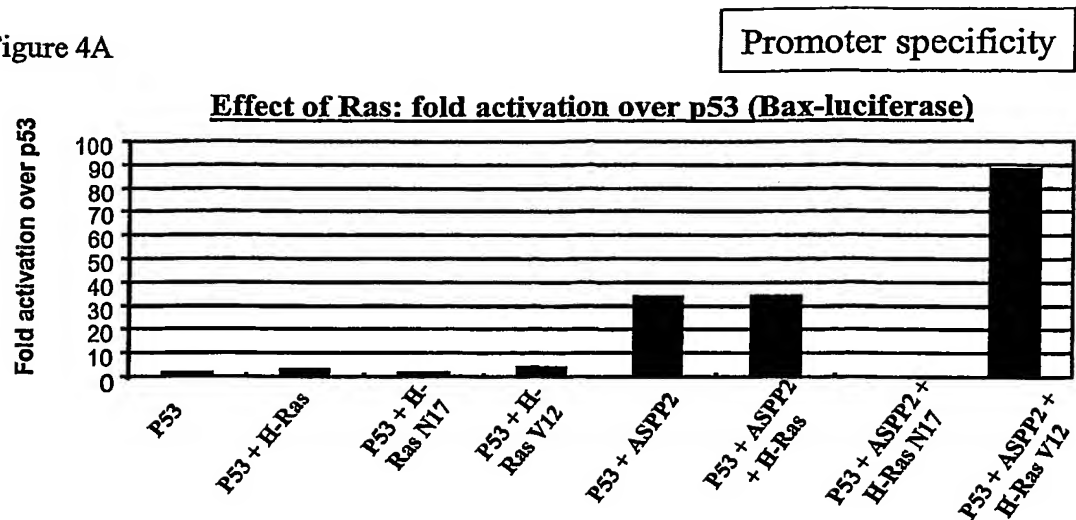


Figure 4B

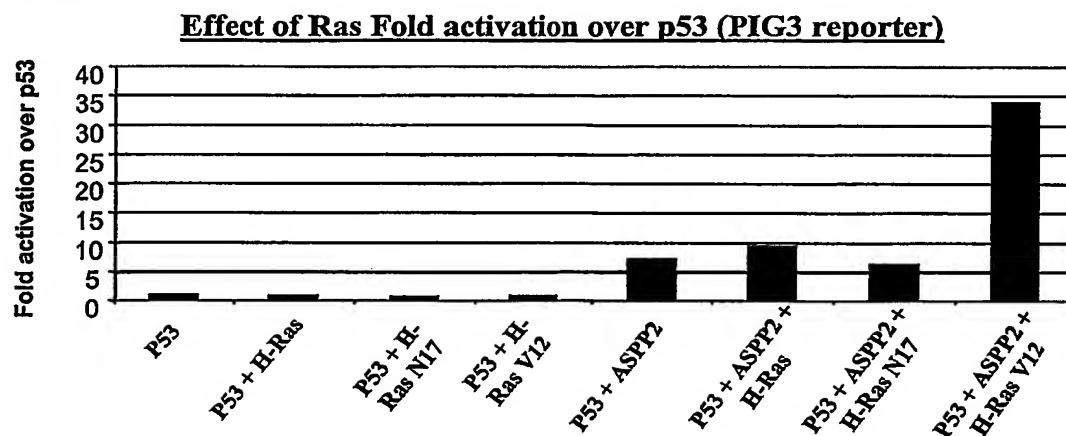


Figure 4C

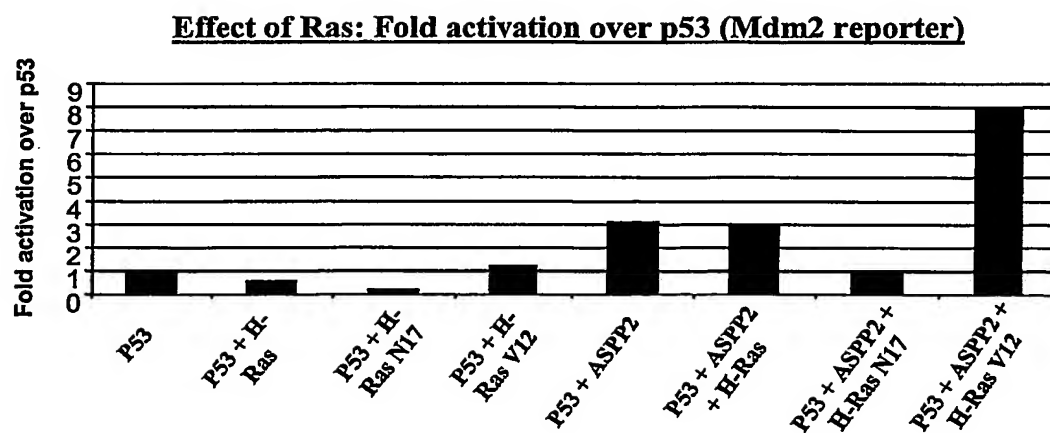


Figure 4D

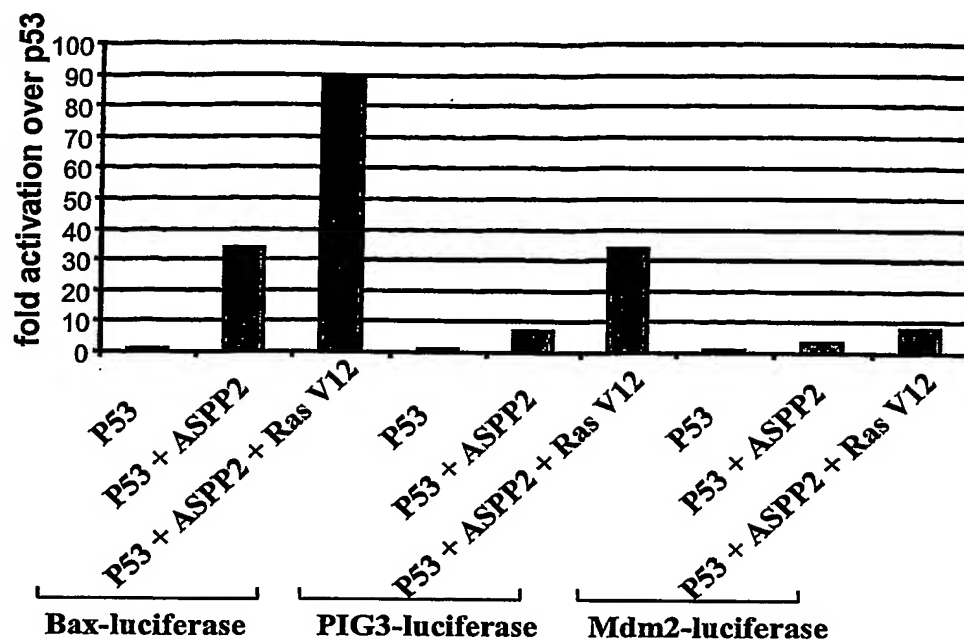
Effect of rasV12 on transactivation: comparing three reporters

Figure 4E

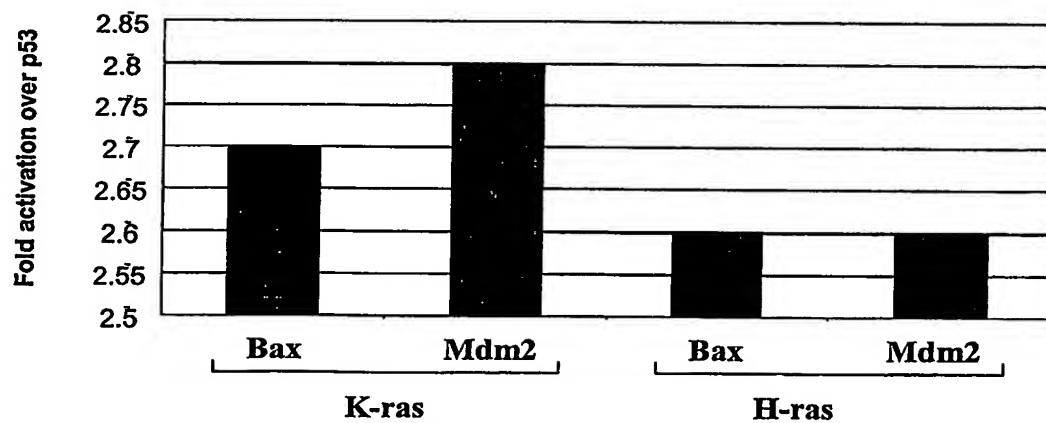
Promoter specificity of rasV12

Figure 5A

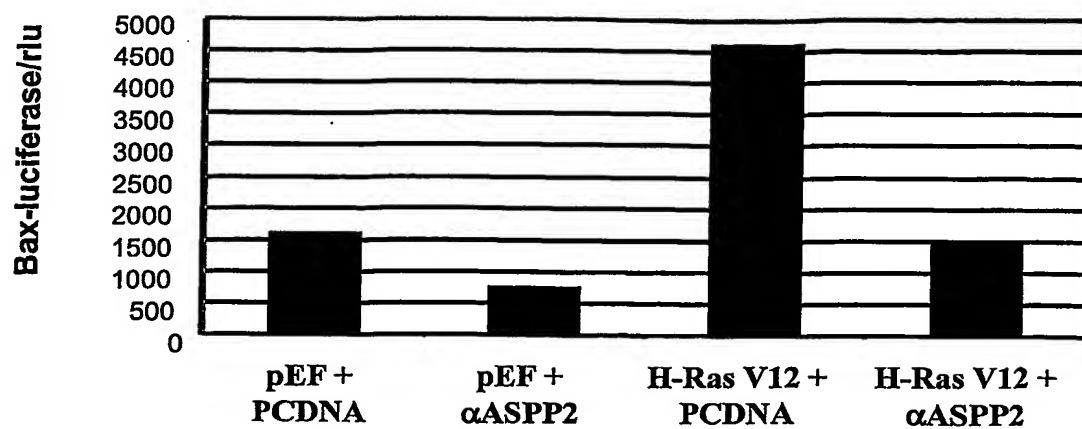
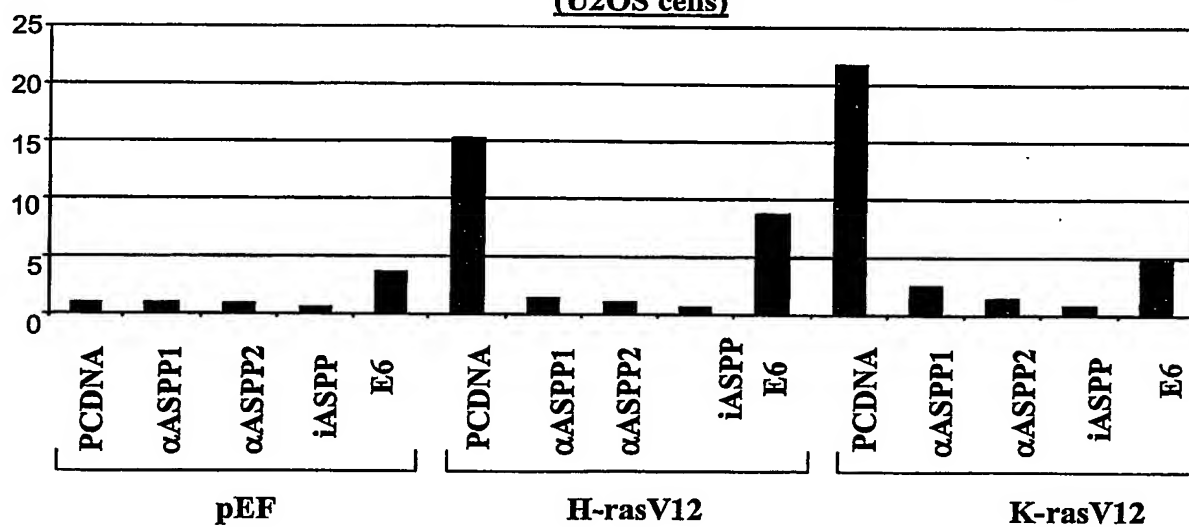
**H-rasV12 activates endogenous ASPP2 to transactivate bax reporter
(U2OS cells)**

Figure 5B

**H- and K-rasV12 activate endogenous ASPP1, ASPP2 and p53 to transactivate bax-reporter
(U2OS cells)**

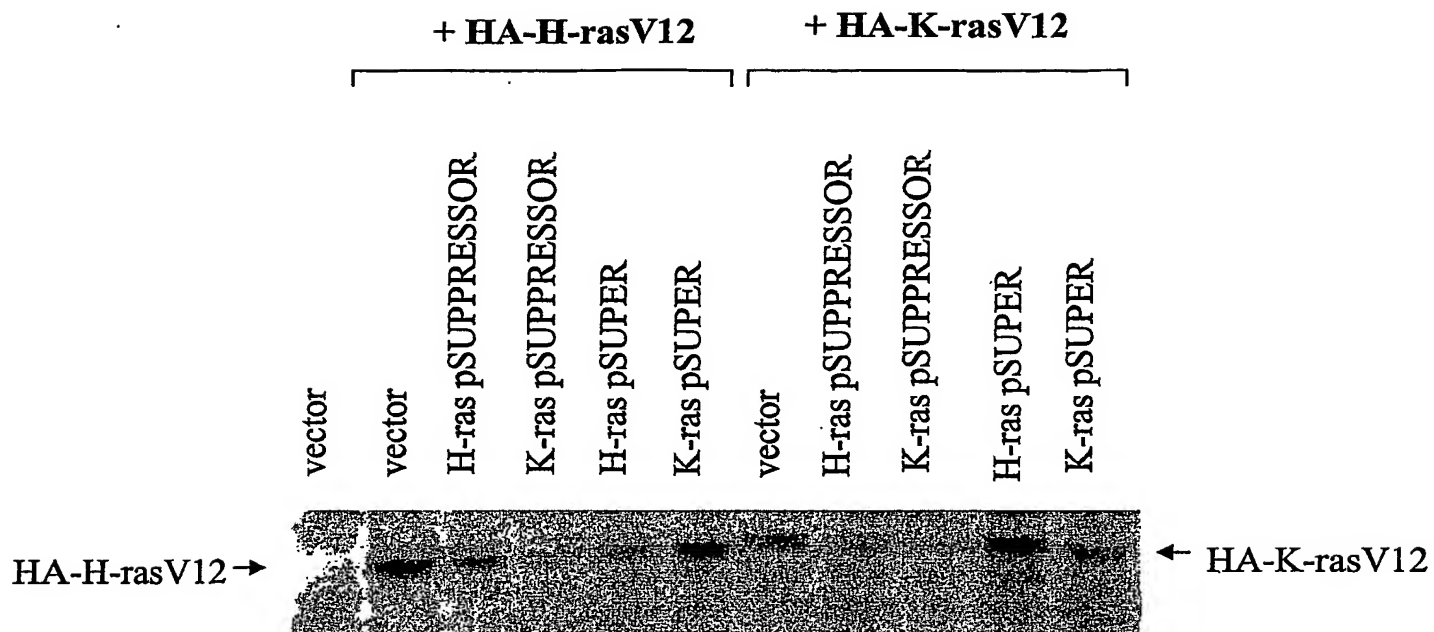


Figure 6

Figure 6B

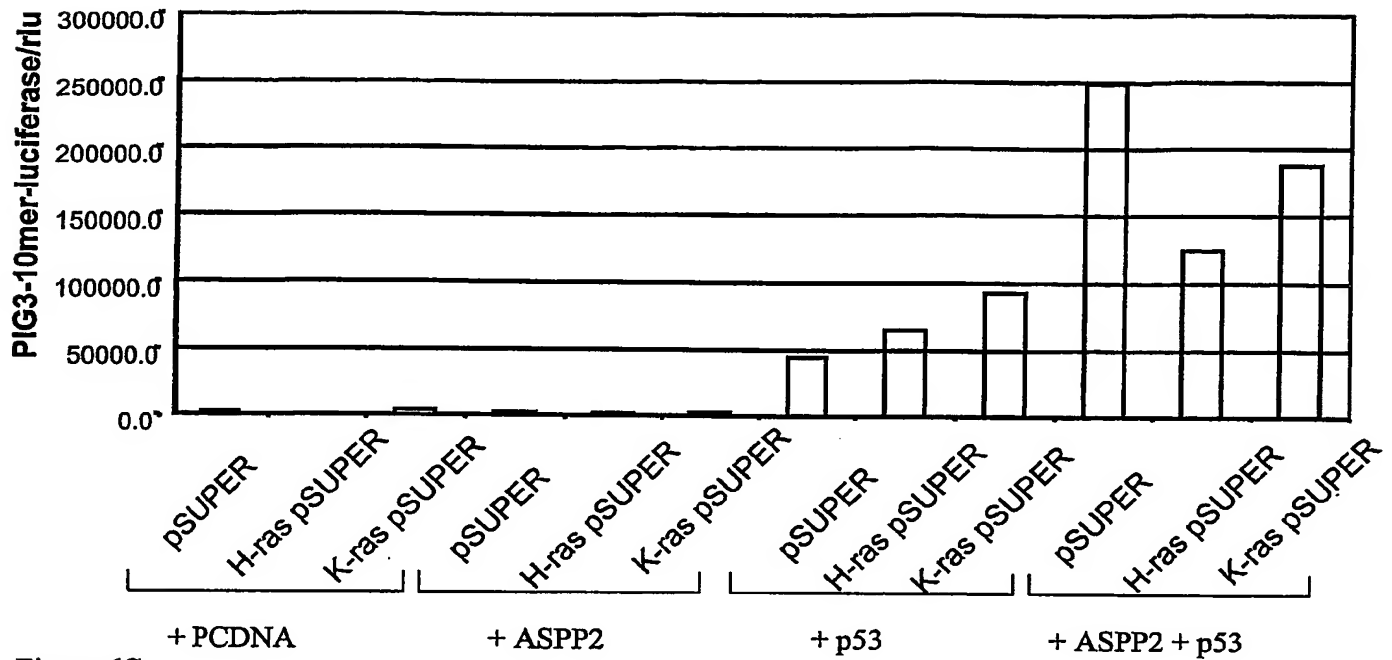


Figure 6C

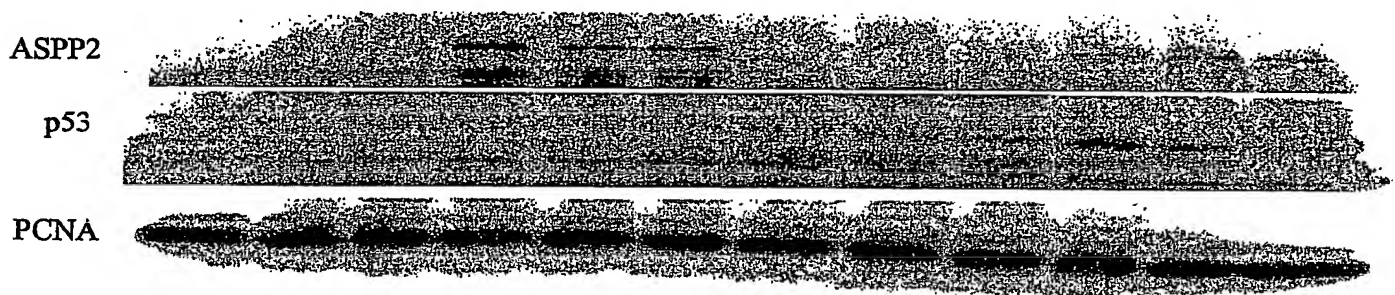


Figure 7B

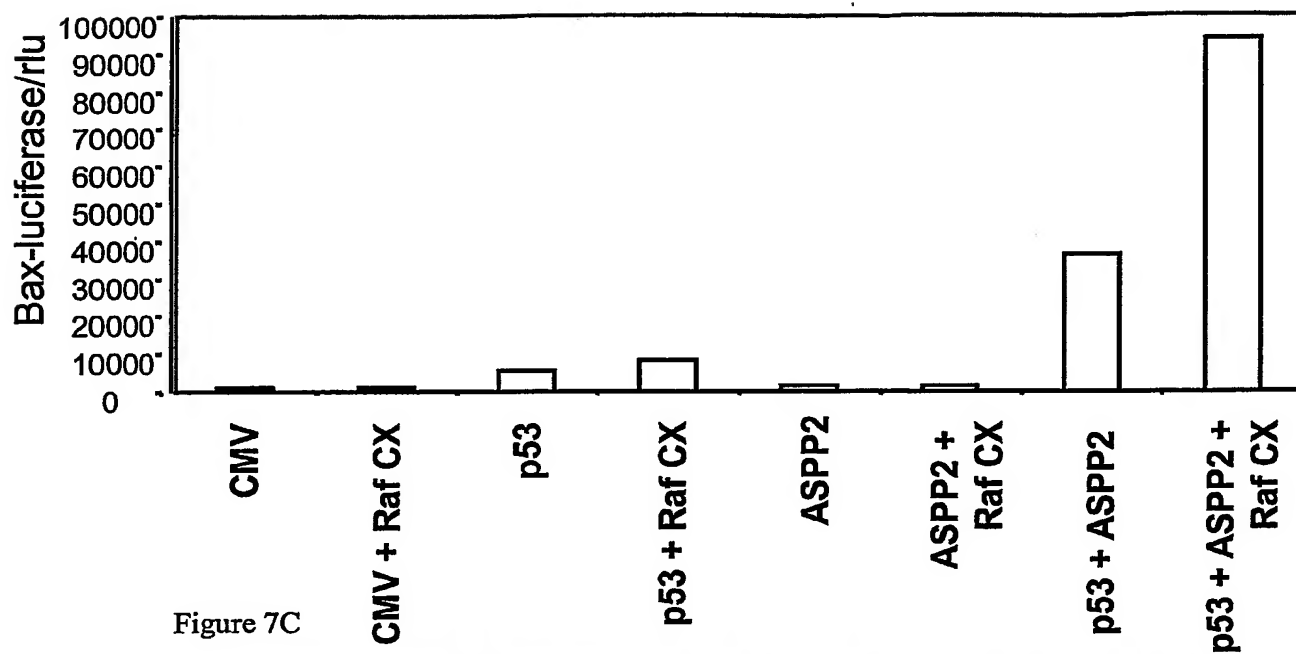


Figure 7C

ASPP2



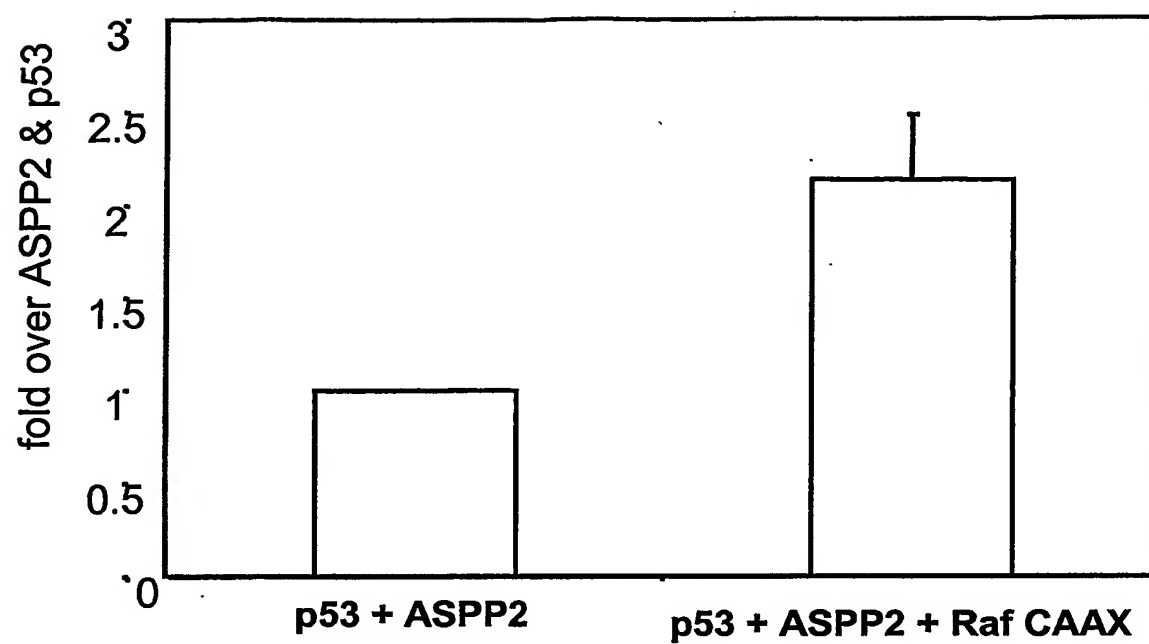
Raf



p53



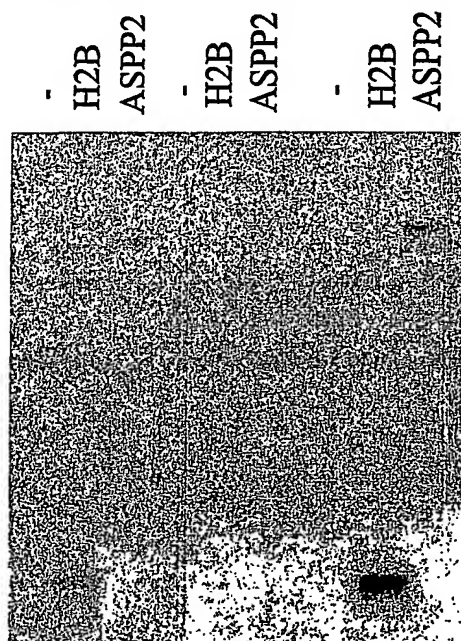
Figure 7d



12/39

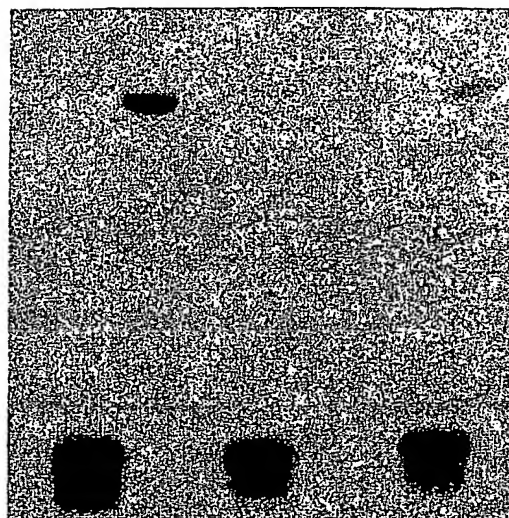
Figure 8A

MAPK1 p70S6K p90rsk



PKA PKB p38SAPK

H2B ASPP2 H2B ASPP2 H2B ASPP2



ASPP2

H2B

Figure 8B

PKA p38 SAPK MAPK1 p90rsk

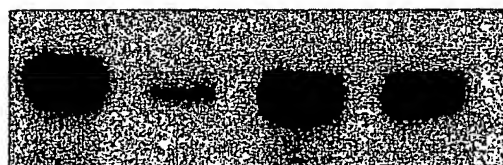


Figure 8C

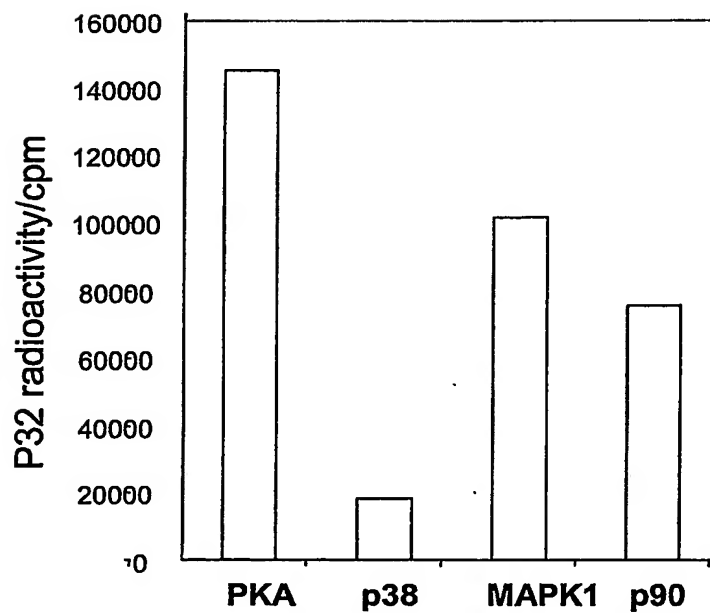


Figure 8D

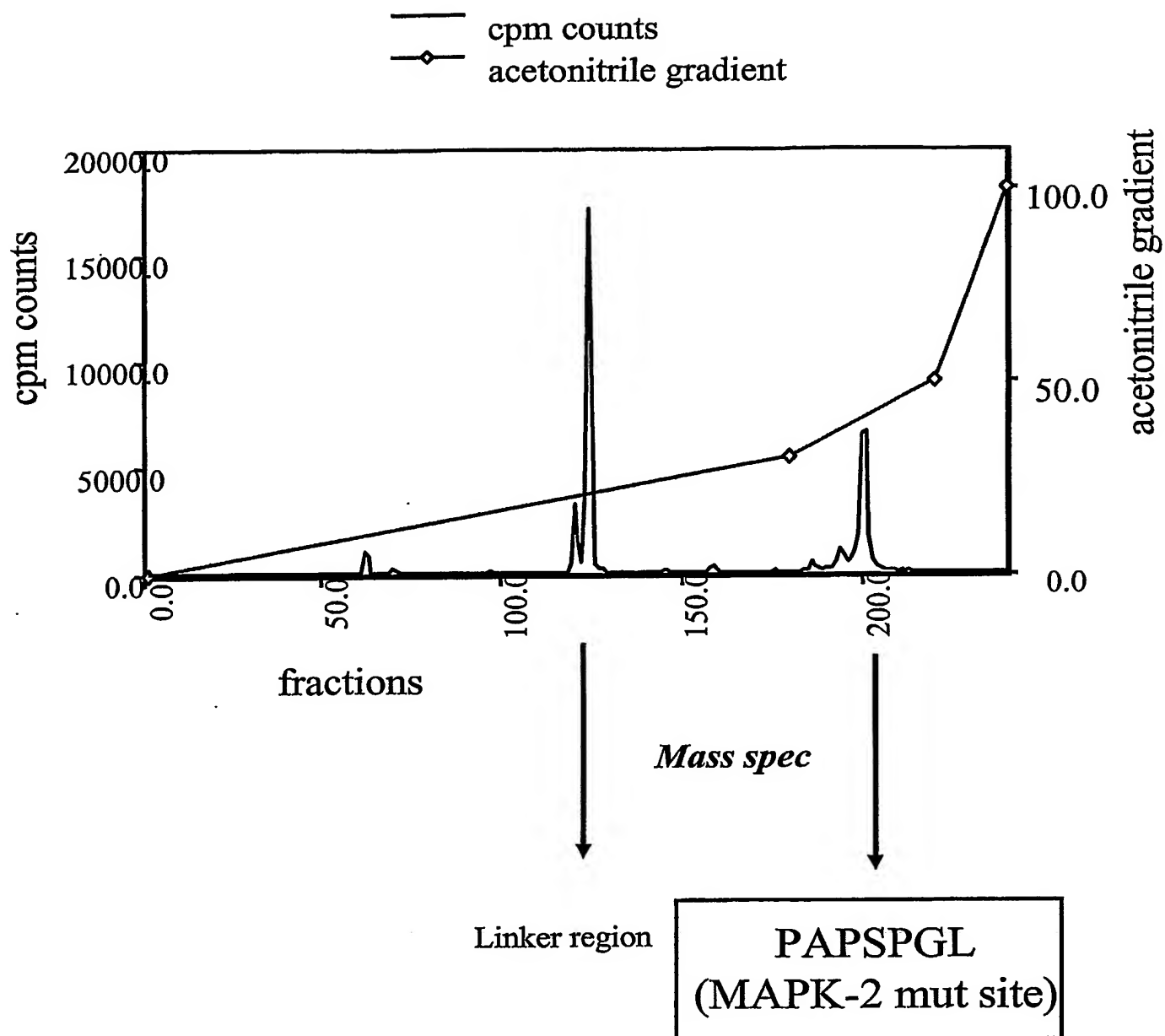


Figure 9

C-term of ASPP2:

550 - QPRVLLSPSIPSVGQDQTLSPGSKQESPPAAAVRPFTPQPS
KDTLLPPFRKPQTVAAASSIYSMYTQQQAPGKNFQQA VQS
ALTKTHTRGPHFSSVYGKPVIAAAQNQQHPENIY SNSQ
GKPGSPEPETEPVSSVQENHENERIPRPLSPTKLLPFLSNP
YRNQSDADLEALRKKLSNAPRPLKKRSSITEPEGPNGPNI
QKLLYQRTTIAAMETSVPSYPSKSASVTASSESPVEIQNP
YLHVEPEKEVVSLVPESLSPEDVGNASTENS DMPAPSPGL
DYEPEGVPDNSPNLQNNPE - 849

S — MAPK sites
SS — PKA site

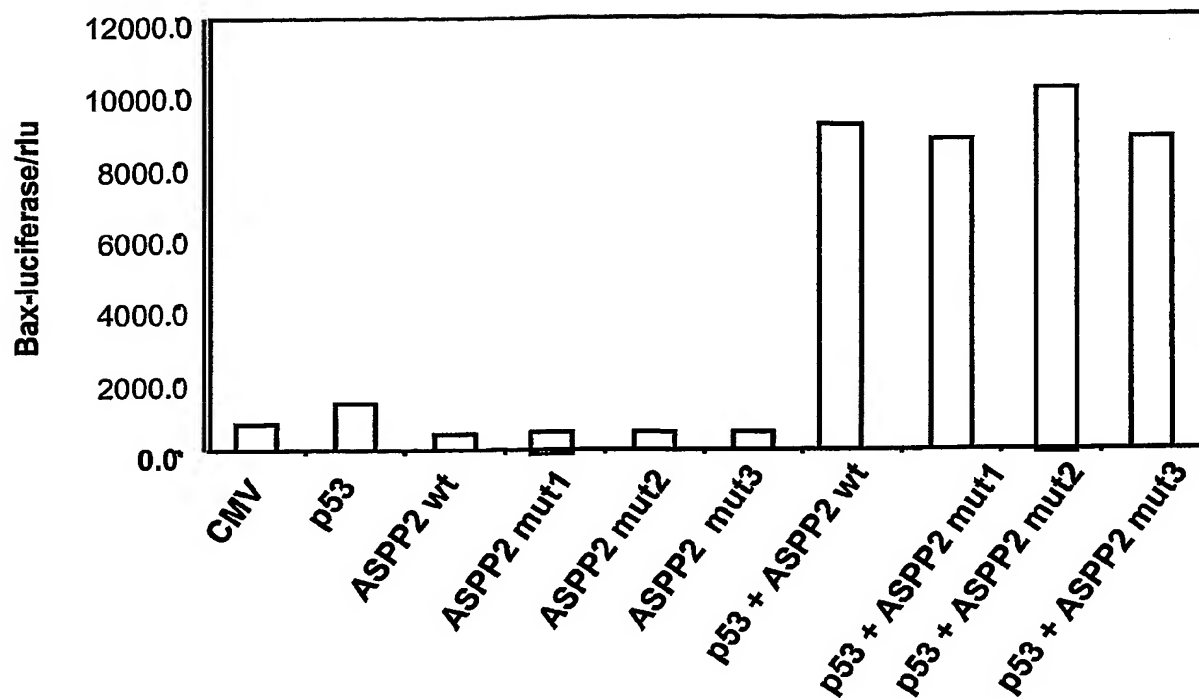
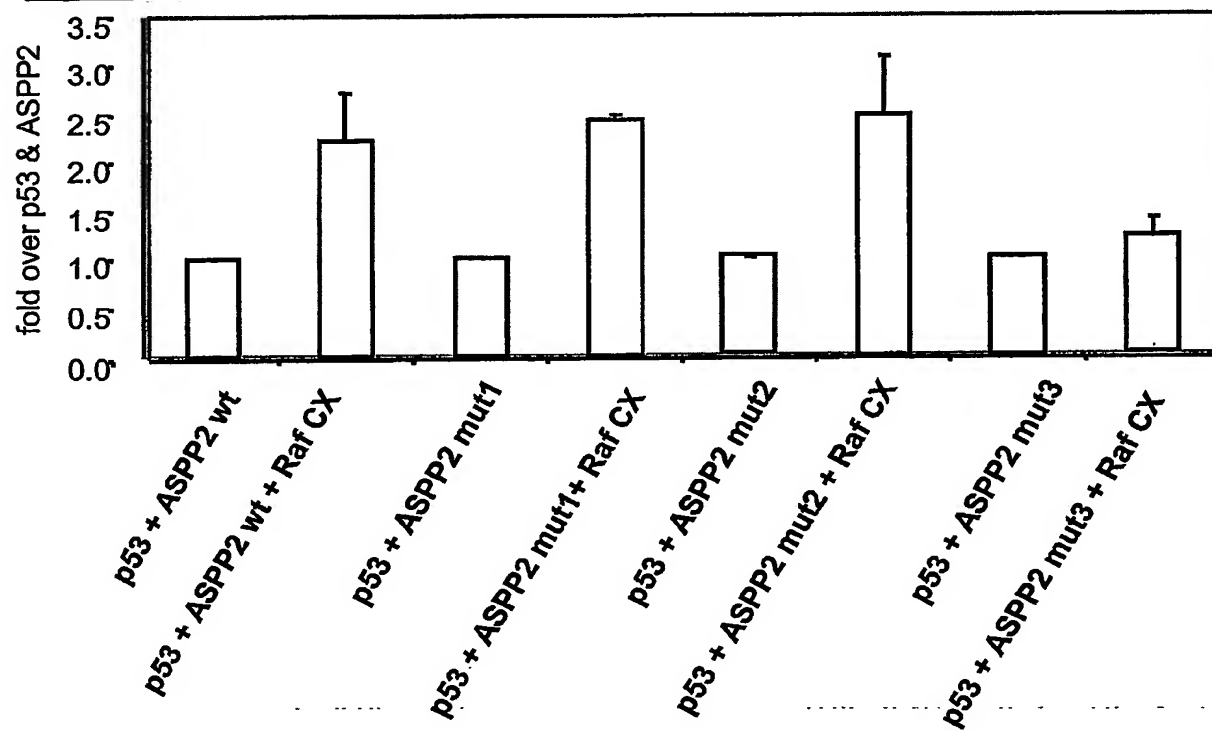
Figure 10A**Figure 10B**

Figure 11A

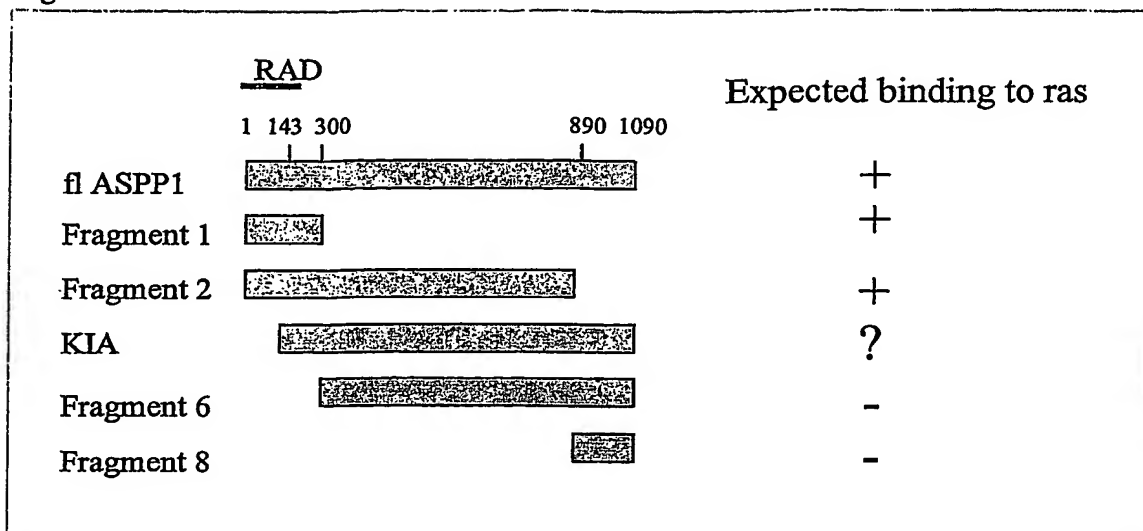


Figure 11B

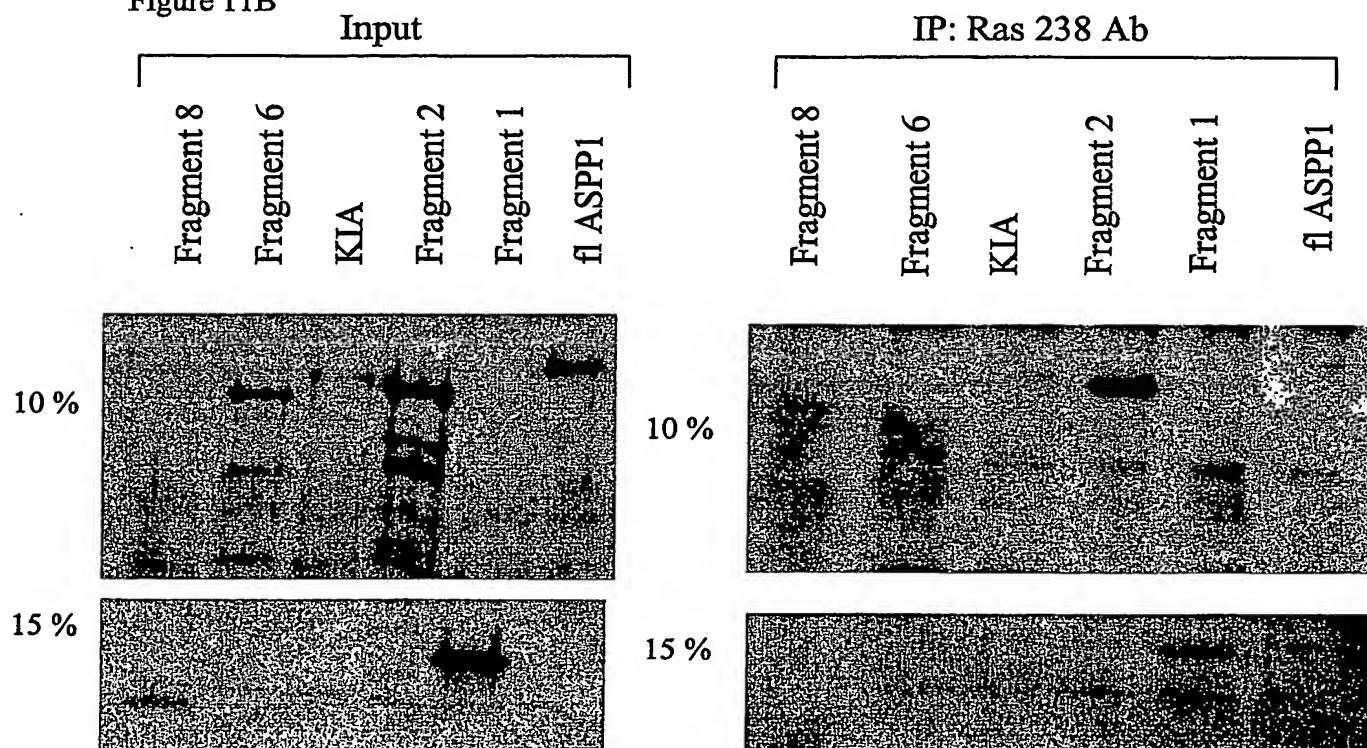


Figure 12

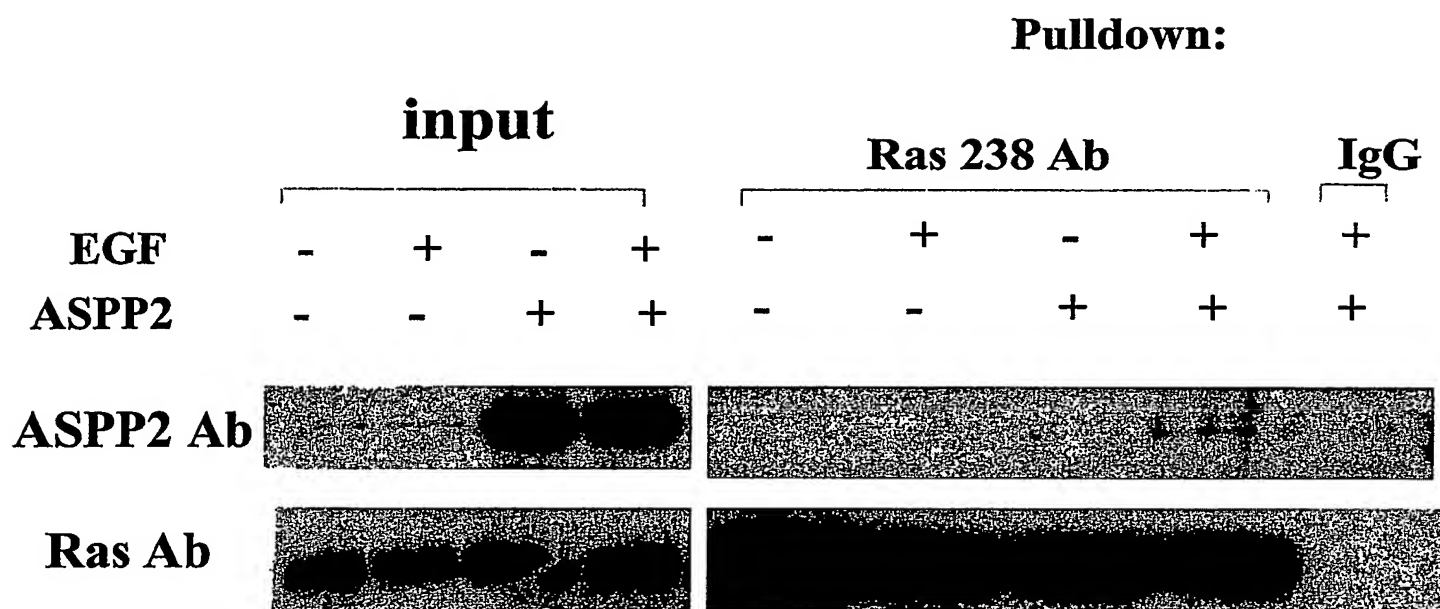
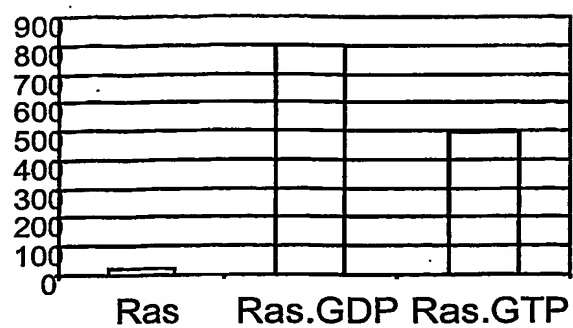
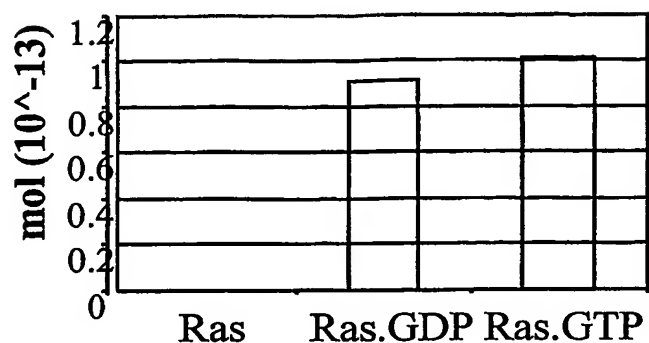
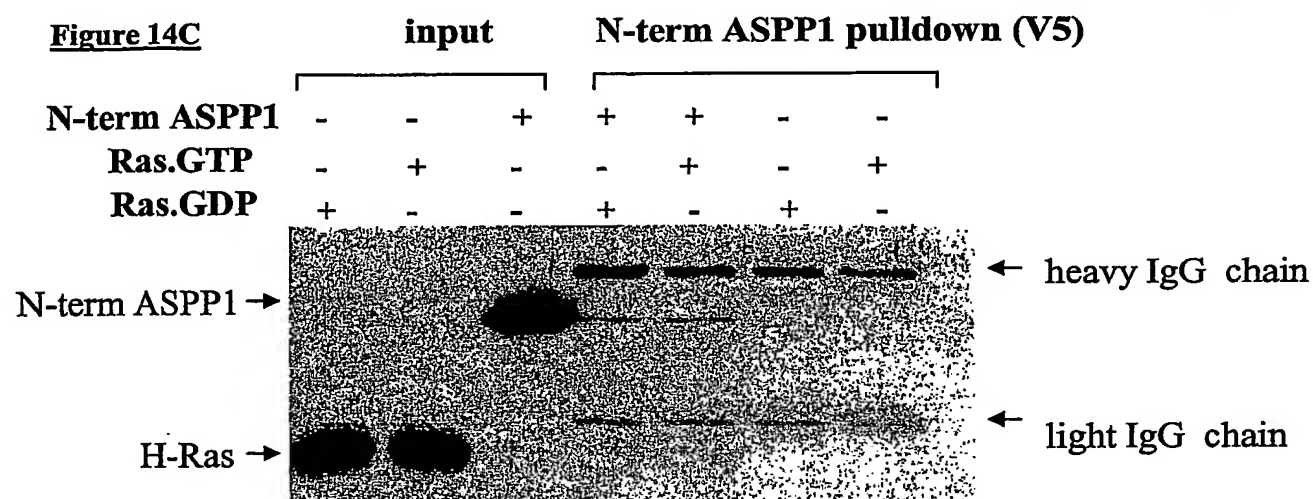


Figure 14A**Figure 14B****Figure 14C**

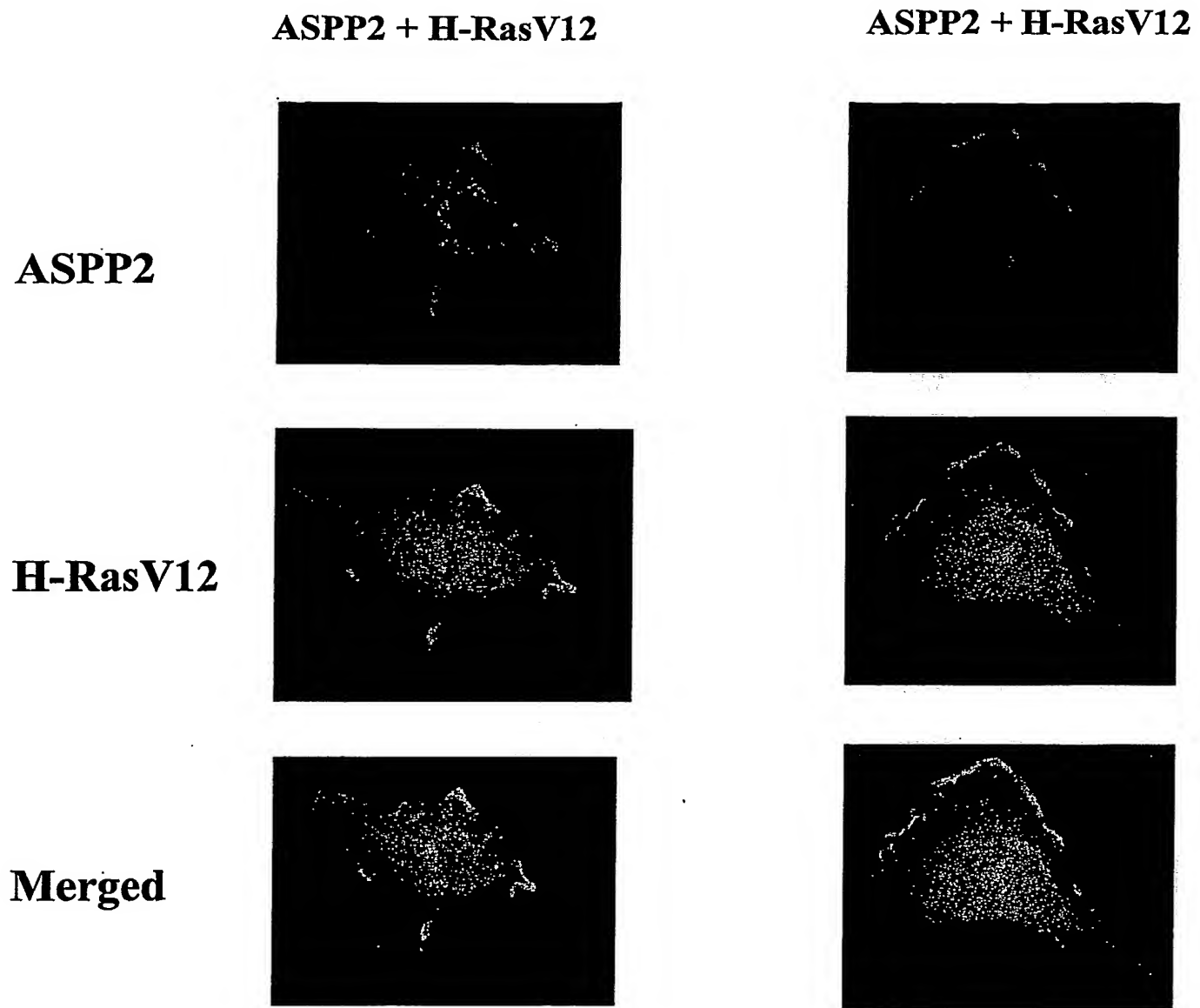


Figure 15

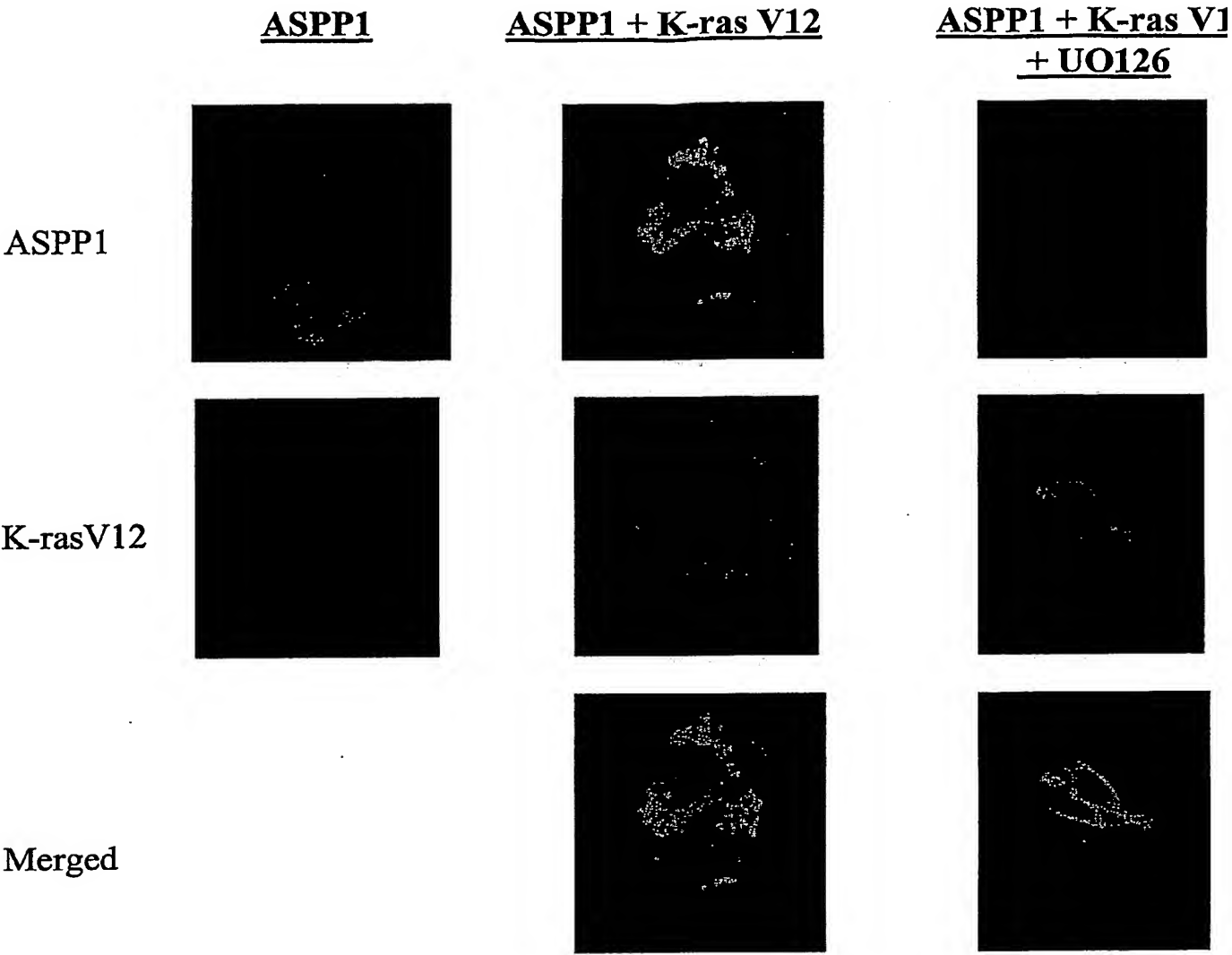


Figure 16

Figure 17a

GAGCCCCGATCCCGCCGAGCTGCCGCTCGCCGCGCGGGCCGAGAGCACGGCGCGGGAGCGCGGCTTAGGAGG
CGGCGCGAGCGGTGGGACAGCTCGGCGCGGAGCGTCTGTGAGCGCGCGGCCGAGGCGTTCGCGGACTCTCCCCGCGAT
GATGCCGATGATATTAAGTGTCTTTCTTGAGCAACAATGAACAGATTTTAAACAGAAAGTTCCTATAACACCGGAAACAACT
GTCCGAGATGTGTAGAAATTTGCAAGGAACCTGGAGAAGGCAGCTGCCATTTAGCTGAAGTGTGGAGGGGAAATGAACGT
CCCATACCTTTGATCATATGATGTACGAACATCTTCAGATATGGGGTCCACGGAGGGAAGAGTGAATTTTTCCTTCG
ACACGAGGACTCCCCAACTGAGAACAGTGAACAAGGTGGCCGTAGACCCAAGAGCAACGAACCTCAGAGAAATGTAATAA
ATGTACCTGGAGATAAACGTAATATGGGGTGGGAATCCACGTGTGAACTTACCTCTCAGAGCTCCAGATATG
GCAGCTAGGCAACAGCAGCAGATTGAAATCAGCAGCAGATGTGGTTGCCAAGGAACAGCGTTTACATTTTCTAAAGCA
ACAGGAGCGCGCTCAGCAGCAGTCTATTTCTGAAATGAAAGCTTCAGAAATTGAAAGAACGAGTTGAAGCCAGGAGA
ACAAGCTGAAGAAATTCGTGCAATGAGAGGACAAGTCGACTACAGCAAAATCATGAACGGCAATCTGTCTGTGAAATA
GAAAGGTTTCAGTGCCATGTTCAGGAAAAGAGCAGGAAGTACAGACTGCAATTTTAAGGGTTGATCAGCTTAGTCAGCA
ATTGGAAGATTTAAAGAAAGGAAACTGAATGGGTTCCAGTCTTACAATGGCAAATTGACGGGACCAGCGGCGGTGGAGT
TAAAGAGCTGTACCAAGAACTACAGATTCTGTAACCACTTAACCAGGAACAAATTCAAAATTCAGCAGCAGAGGAA
CTCTTAAATAAGCCGCAACATGGAAGTGGAGTGGCCATGATGGACAAGCGAATCAGTGAACCTGCGTGAACGCTCTCTATGGGAAAA
AATTCAGCTGAACCGTGTGAATGGCACGTCATCACCACAGTCCCTCTGAGCACATCGGGCAGGGTCTGTGTGGGGC
CTTATATCTAGGTTCCCAAGTCCGGAAGCTTTCTGTCTGGGGACCTATAAGCCCCAGTCTCTCAGTATTCGCTCA
AATGCTGCTCATGGAAGATCCAAATCCGTAATGATGGAACCTGGCCAACATTAAACAGAAATCTAGCTCTTCCGTGAA
ACCAGTGCAGGTGGCGGTGCAGACTGGAAGGATCCGAGCGTGGAGGGTCTGTCAAGCAGGGCACTGTCTCCAGCAGC
CTGTGCCCTTCTCAGCACTGGGACCCACGGAGAGCCGGGCATCGAGATTGGTAAAGTGCCACCTCCCATCCGSGGTGTA
GGCAAGCAGCTGCTCCAACTATGGGACATACCAAGTCTTACACCTCTGGGTCTGGGTGCAAGCTCCCTGGAAG
GAGGAAGGAGGAGCTTCGCCAGGCCAGTGCAGGCTGCCAAGTGCAGAGAGGCCACCTGCTGCCGCCACAGGCA
GCACCCCCAGCAGGCTCTCAACAGATTGAGCAGAGGATTTCCGTACCGCCAAGTCCACGTAACCGCCAGCGGGA
CCACCTGCATTTCCAGCTGGGGACAGCAAGCTGAACTCCCACTGACAGTGGCCATTAGGCTTTCTTGGCTGATAAAGG
GTCAAGGCCAGGAGCTCTCCAGGAAGGACCCAGCAGTGAATTCAGTTCCATATATCTCATGTACCTCCAGCAAGCCA
CACCACCTAAGAATTACAGCCGGCAGCACACAGCGCTTAAATAAGTCAGTTAAAGCAGTGTATGGTAAGCCGTTTTC
CTTTCGGGTTCAACCTCTCCATCGCCGCTGCCGTTCTTTCAGGGTCACTGTCCACGGGCACACCAGCCCTCAGCCACC
TTGAAAGTACTGAGAAAGAGCTGAGCAGGATGGCCCGCCCGCCAGATGGCAGCACCGTGGAGAGCTGCCAC
GGCCTCAGCCCCACCAAGCTCAGCCCCATCGTGCAATTCGCCACTGCGCTACAGAGTGTATGAGACCTGGAGGCCCTC
CGCAGGAAGCTGGCCAAAGCGCCCGCCCGCTGAAAAAGCGAGCTCCATCAGAGGCCGAGGGCCCCGGCGGGCCCAA
CATCCAGAAGCTGCTGTATCAGCGCTTCAACCCCTGGCCGTGGCATGGAGGGCACCCCTTTCTACAGCCAGCCCT
CCCAGGACTTTCATGGGCACCTTGGCCGATGTGGACAATGGAAACCAATGCCAATGGAAACCTGGAAAGAGCTCCCCCT
GCCAGCCACAGCCCACTCCCGCTGAGCTGCCCCGTCTCAGATGCCAATGTAATGAGTTACCTTCCCCGAAAC
AGAGGAGCTCATCTGTCCCCAAACCCACCAACTGCCGAGCCGGCAGAGGACAATAACAACAGTGGCCACAGTCTCC
CCACCCAGGAGGAGCTCTCCAGCAAGCCCAAGCAGATGAAGGATCACTCCAGGGGAAGAGCAGGTTCCCTCCAGCTCTTCCC
CCTGCCAGCCACCTCTGCACTCCACGAAACAGCGGACCACTTGAAGAAGCCCACTCGGAGCGGACGGGGCAGCG
GCTGAGAGTCCGGTTTAAACCCCTGGCACTGCTCTGAGACGCGTCTCTGGAAGGAGAGTTCGATCTGGTGCAGAGGATCA
TCTATGAGGTGGAAGATCCAGCAAGCTGTGAGGAGATGGAAGGATCACTCCAGTGCACAAAGCGCTGCGCCGCCACCAT
CACATCGTGAAGTCTCTGTGGATTTTGGTGTCAAGTGAATGCTGCTGATAGTGTATGGATGGACGCGCTGCATGCGC
TGCTCTGTGAACAGCGTTCACTCTGCAACAGCTGGTGGAGAGTGGTGGCCGCTTTTGGCTCAACCATAGCGACA
TTGAAACTGCTGCAGACAAGTGTGAGGAGATGGAAGGATCACTCCAGTGCACAAAGCGCTGCGCCGCCACCAT
AAGCTGGGTGTGATGAACAAAGGTGTGGCGTATGCTCTGTGGGACTACGAGGCCAGAACAGTGAAGAGCTGCTCTCCA
CGAAGGGGACGCCCTCACTCTGAGGCGCAAGGACGAAAGCGAGACTGAGTGGTGGTGGGCTGCTGCTGGAGACCGGG
AGGGCTATGTGCCAAAAACCTGTGGGGCTGTATCCAGGATCAAAACCCGACAGCGAACACTCGCCTGAACTTCTCTT
TGGAGCACCGCATGGTCTTGCCAGCTACAGGAGGCCATTGAAGATTTATGTGCTGTTTTCCAGGAAAGCTGCAGCTAG
AAAATGGTCTTAATGGTGTCTACTTTAGCAGACAGCGTCCCAATGTGAATCCTACAGTTTCCAGGTGAGGCCCTTCTC
CAGTTTGGCCATTAAGTGGGAGAGTACTTTCCGCTTCAAGGACTGAATTTGGCAATTACTATAAATCCAAATAAATAC
CCACTTTCAAAACACCCACCCCTCTTGCCATTAGAAGTCCCATACCCCGGTTGGTTGCCAGTGAAGACAGAAGCTCT
TACTGACTTGGCCCCGAGGCCATCACCCCTCCAGCAGTGAACACTGTCCGCGCTGTGAGGCTGTCTCCCTGCGACCG
CCCTGCCCCCGTACCGAATCGGACACTCATCTTCTCAGCTTCCACACATGATCTCTTCTCCCTTCATCACCAAA
GGAGCCTCTGTATGGAACATGTCCAGTGTGCTGCCAGTGTATGCTTCCAGTACCACCTCTGCTCGGCCGCTTG
GGGGTTCGCTTCTGTTCAGTTACCTAAAGGCTGATTGTGAGGCCAGCACTGTGGCTGGACTGCGCGCCAGGG
CACCAGGACCCCTAAGACCAAGTGAACCTGGGAGAGCCTCAGCATATACTCTCTCTCCGATCTCAGACCTGTCTATG
CTGCTCAGTGTGTTCTCACCCCTGCAAGCTCAATTCAGTTCCCTGAATGGAGTCAGGTGTGAGGGCCGTGGCAGCGG
AGGGTGGTTGGGGTGGGGCTGGGGTGGACTGGTGTGAGGCCAGACCAGGGCCAGGTAGACGGGGCTGTTTGGTGCCTG
AAGGATGGCAGACGCTGTGTGAGGAGGGCCGCCCAAGGAGCAGCAGTGGGGCAGAGGAGCTGGGGTCAGGGGCC
ACCCCTCTGCGCATCTCCCTGCTGGGCTGGTGTGAGGCCACCTTGTCCAGGCCAGCCCTCAAGGCAAGGAGGGC
GCTTCACTGAGGTGTGAATGTACGTACAGGCTTTTATATACCAAAAGTATTTTGTAGTACCAATCAAGCTACCC
GAACATATGTGGAATTTTTTTTTTCTCATTAAATACAGGCCCTTAGGCTCTATTTTTCATGTATGAGTCGTGTGTA
TTTATGTAAATATGTGTACAGACTCACTGATGCAGCACTGTAGCCCATCCTTGGAGCACTGACTGTACATAGTGTG
GTGAAGAAAGTGAACGCCCTTGTAGAGCAGCCGACCAAGGAGCATGGCCGCTGCCAGCCAGACGCTGCTGACGCTG
TGTAATGTGCACATAAACCCGCTCTACCCCGG

Figure 17b

GTCACGAGCGTCGAAGAGACAAAGCCGCGTCAGGGGGCCCGGCCGGGGGAGCCCGGGGCTTGTTGGTGCCCCAGC
CCGCGCGGAGGGGCCCTTCGACCCGCGCGCGCGCGCTGCCGCCGCCGCCCTCGCAACAGGTCCGGGGCGGCCCTCGCTCT
CCGCTCCCTCCCGCGCATCCGCGACCCCTCCGGGGCACCTCAGCTCGGGCCGGGGCCGAGTCTGGCCACCCGCTTCCATG
CGGTTCCGGGTCCAAGATGATGCCGATGTTTCTTACCCTGTATCTCAGTAACAATGAGCAGCACTTCACAGAAGTTCAGT
TACTCCAGAAACAATATGCGAGAGACGTGGTGGATCTGTGCAAAAGAACCCGGCGAGAGTGATTGCCATTGGCTGAAGTGT
GGTGTGGCTCTGAACGTCCAGTTGCGGATAATGAGCGAATGTTTGTATGTTCTTCAACGATTGGAAGTCAGAGGAACGAA
GTTCCGCTTCTTCTTCGTCATGAACGCCCCCTGGCAGGGACAATTGTGAGTGGACCAAGATCTCAGGATCCAAGTTTAA
AAGAAATGGTGTAAAAGTTCCCTGGTGAATATCGAAGAAAGGAGAACGGTGTAAATAGTCTTAGGATGGATCTGACTCTTG
CTGAATTCAGGAAATGGCATCTCGCCAGCAGCAACAGATTGAAGCCAGCAACAATTGCTGGCAACTAAGGAACAGCGC
TTAAAGTTTTTGAACAACAAGATCAGCGACAACAGCAACAAGTTGCTGAGCAGGAGAAACTTAAAGGCTAAAAGAAAT
AGCTGAGAATCAGGAAGCTAAGCTAAAAAAAGTGAGAGCACTTAAAGGCCACGTGGAAACAGAAGAGACTAAGCAATGGGA
AACTTGTGGAGGAAATGAACAGATGAATAATTTGTTCCAGCAAAAACAGAGGGAGCTCGTCTGGCTGTGTCAAAAGTA
GAAGAATGACCCAGCAGCTAGAGATGCTCAAGAACCGGCAGGATCGACAGCCACCATGACAATCAGTCTGCAGTGGCTGA
GCTTGATCGCTCTATAAGGAGCTGCAGCTAAGAAACAATTTGAATCAGAGCAGAAATGCCAAGCTACAACAACAGAGGG
AGTGTTTGAATAAGCGTAATTCAGAAGTGGCAGTCATGGATAAGCGTGTAAATGAGCTGAGGGACCGGCTGTGGAAGAAG
AAGGCGCTCTACAGCAAAAAGAAAATCTACAGTTTCTATCTGATGGAATCTTCCCGCAGCAAGCCGCTCAGCCCCAAG
CCGTGTGGCTGCAGTAGGTCCTTATCCAGTCGTCTACTATGCTCGGATGCCCTCAGGCCCTGAATTGCTGGTGAAGC
CAGCCCTGCCGGATGGTTCTTGGTCATTGAGGCTTCAGAGGGGCCGATGAAAATACAGACACTGCCCAACATGAGATCT
GGGGCTGCTTCACAACTAAAGGCTCTAAATCCATCCAGTTGGCCCTGATTGGAGTCTTCAAATGCAGATCTTTTCCC
AAGCCAAGGCTCTGCTTCTGTACCTCAAAGCACTGGGAATGCTCTGGATCAAGTTGATGATGGAGAGGTTCCGCTGAGGG
AGAAAGAGAAGAAAGTGCCTCGGTTCTCAATGTTGATGTCAGTAGACAGTCCAATGCCCACTTCTTTGGTACTCTG
AGGAAGAACCAGAGCAGTGAAGATATCTTCCGGGATGCTCAGGTTGCAATAAAAATGTGGCTAAAGTACCACCTCCTGT
TCTTACAAAACCAAAACAGATTAAATTTGCCCTTATTTGGACAACTAATCAGCCACCTTCAGACATTAGCCAGACGGAA
GTTCTCAGCAGTTGTCAAAGTTGTTCCTGCTCAATGGGAATCAAACCAAAACAGCAGGGCAGCAGCCGAGAGTCTGCTA
TCTCCAGCATACCTTCGTTTGGCCAAGACCAGACCCCTTCTCCAGGTTCTAAGCAAGAAAGTCCACCTGCTGTGCCGT
CCGGCCCTTACTCCCGAGCTTCCAAAGACACCTTACTTCCACCCCTTCAGAAAACCCAGACCGTGGCAGCAAGTTCAA
TATATTCATGTATAGCAACAGCAGGCGCCAGGAAAAAATCTCCAGCAGGCTGTGCAGAGCGCTTGACCAAGACTCAT
ACCAGAGGGCCACACTTTTCAAGTGTATATGGTAAGCCTGTAAATGCTGCTGCCAGAAATCAACAGCAGCACCAGAGAA
CATTTATTCCAATGAGCGGGCAAGCCTGSCAGTCCAGAACCTGAAACAGAGCCTGTTTCTTCAAGTTCAGGAGAACCATG
AAAACGAAGAATCTCCCGCCACTCAGCCCACTAAATTAAGTCTTCTTATCTAATCCTTACCAGAACCCAGAGTGA
GCTGACCTAGAAGCCTTAGCAAGAAACTGTCTAACGCACCAAGGCCTCTAAAGAAACGTAGTTCTATTACAGAGCCAGA
GGGTCTAATGGGCCAAATATTCAAGAGCTTTTATATCAGAGGACCACCATAGCGGCCATGGAGACCATCTCTGTCCCAT
CATACCCATCCAAGTCAGCTTCTGTGACTGCCAGCTCAGAAAGCCAGTAGAAATCCAGAATCCATATTACATGTGGAG
CCCGAAAAGGAGGTGGTCTCTCTGGTTCCGTAATCATTGTCCCGCAGAGGATGTGGGGAAATGCCAGTACAGAGAACAGTGA
CATGCCAGCTCCTTCTCCAGGCCCTTGATTATGAGCCTGAGGGAGTCCAGACAAACAGCCCAATCTCCAGAATAACCCAG
AAGAACCAATCCAGAGGCTCCACATGTGCTTGTATGTACCTGGAGGAGTACCCTCCATACCCACCCCAACCATACCCA
TCTGGGGAGCCTGAAGGGCCCGGAGAAAGACTCGGTGAGCATGCCGCCGCTGAAATCACCGGGCAGGTCTCTCTGCCCTCC
TGGTAAAGGACAAACTTGGCTAAAAGTGGCTCAGAGCGTATCGCTCATGGAATGAGGGTGAATTCACCCCTTGTCTT
TACTGCTAGATTCTGTTTGGAGGGAGAAATTTGACCTTGTACAGAGAATTTATTTATGAGGTTGATGACCCAAGCCTCCCC
AATGATGAAGGCATCAGGCTCTTCACAATGCTGTGTGTGCAGGCCACACAGAAATCGTTAAGTTCCCTGGTACAGTTTGG
TGTAATGTAAATGCTGCTGATAGTATGATGGATGGACTCCATTACATTGTGCTGCCCTCATGTAACAACGTCACAGTGTGTA
AGTTTTTGGTGGAGTCAGGAGCCGCTGTGTTTGGCATGACCTACAGTGACATGCAGACTGCTGCAGATAAGTGCAGAGGAA
ATGGAGGAAGGCTACACTCAGTGTCTCCCAATTTCTTATGGAGTTCAGGAGAAGATGGGCATAATGAATAAAGGAGTCAT
TTATGCGCTTTGGGATTATGAACCTCAGAAATGATGATGAGCTGCCCATGAAAGAAGGAGACTGCATGACAATCATCCACA
GGGAAGACGAAGATGAATCGAATGGTGGTGGGCGCGCCTTAATGATAAGGAGGGATATGTTCCACGTAACTTGTGGGA
CTGTACCAAGAATTAACCAAGACAAAGGAGCTTGGCCTGAACTTCCACACAGAAATTTAGTCAATGAAGAATTAATC
TCTGTTAAGAAGAAGTAATACGATTATTTTGGCAAAAATTTCAAGACTTATTTAATGACAATGTAGCTTGAAAGCG
ATGAAGAATGCTCTTAGAAGAGAAATGAAGGATTGAAGAATTCACCATAGAGGACATTTAGCGTGATGAAATAAAGCATC
TACGTGAGCAGGCCATCTGTGTTGGGGCAAAGGTGTCCTGTTAGCACTCAGATAAGTATACAGCGACAATCCTGTTTT
CTACAAGAATCCTGTCTAGTAAATAGGATCATTATTTGGGCAAGTGGGAAATCAGCTCTCTGTCTGTTGAGTGTTCAT
GCAGCTGCTCTTAAACAGTCTCTCTGCCAGAAAGGACAGTGGCGTCAATCGCTGTCTGTGATTGTCCCGGCCACAG
CAGGCTTGGGGCTCACTGAAGGCTCGAAGGCACTGCACACCTTGATATTGTGTCAGTGAAGAAGCTTAGTGTGGTTGTGAG
TGAACAATAACTTTATTATATGAGTTTTTGTAGCATCTTAAGAATTATACATATGTTTGAATATTGAAACTAAGCTACA
GTACAGTAATTAGATGTAGAATCTGTTTGTAGGCTGAATTTAATCTGTATTATTGTCTTTGTATCTCAGAAATTA
GAACTTGCTACAGACTTACCCGTAATATTGTCAAGATCATAGCTGACTTTAAAAACAGTTGTAATAAATTTTGTAGT
CT

Figure 17c

MMPMILT VFLSNNEQILTEVPITPETTCRDVVEFCKEPGECSCHLAEBVWRGNERPIPFDHMMYEH LQIWGPRREEVKFFL
RHEDSPTENSEQGGRQTQEQRTQORNVINVP GDKRTEYGVGNPRVELTLSELQDMAARQQQIENQQQMLVAKBQRLHFLK
QQERRQQSISENEKLQKLKERVEAQENKLKKIRAMRGQVDYSKIMNGNLSAEIERFSAMFQEKKEVQTA ILRVDQLSQ
QLEDLKKGKLNGFQSYNGKLTGPAAVELKRLYQELQIRNQLNQE QNSKLQQKELLNKRNM EVAMMDKRIS ELRERLYGK
KIQLNRVNGTSSPQSPLSTSGRVA AVGPYIQVPSAGSFPVLGDPIKPSLSIASNAAHGRSKSANDGNWPTLKQNSSSSV
KPVQVAGADWKDPFSVEGSVKQGTVSSQFVPFSA LGPTEKPGIEIGKVPPP IPGVGKQLPPSYGTYPSP TPLGPGSTSSLE
RRKEGSLPRPSAGLPSRQRP TLLPATGSTPQPGSSQIQQRISVPPSPTYPPAGPPA FPPAGDSKPELPLTVAIRPFLADK
GSRPQSPRKGPQT VNSSSIYSMYLQQA TPPKNYQPAAHSA LNKS VKAVYGKPVLP SGSTSPSPLPFLHGSLS TGTTPQFP
PSESTEKEPEQDGPAPADGSTVESLPRPLSPTKLTPIVHSPLRYQSDADLEALRRKLANAPRPLKKRSSITEPEGGPGP
NIQKLLYQRFNTLAGGMEGTPFYQPSPSQDFMGT LADVDNGNTNANGNLEELPPAQPTAPLPAEPAPSSDANDNBLSPE
PEELICPQTTHQTAEPAEDNNNNVATVPTTEQIPSPVAEAPSPGEEQVPPAPLP PASHPPATSTNKRTNLKKPNSERTGH
GLRVRFNPLALLLDASLEGEFDLVQRIIYEVEDPSKFNDEGITPLHNAVCAGHHHIVKFLLD FGVNVNAADSDGWTPLHC
AASCNSVHLCKQLVESGA AIPASTISDIETAADKCEMEEGYIQCSQFLYGVQEKLGMNKG VAYALWDYEAQNSDELSF
HEGDALTILRRKDESETEWWARLG DREGYVPKNLLGLYPRIKPRQRTLA

Figure 17d

MMPMFLTVVLSNNEQHFTEVPVTPETICRDVVDLCKEPGESDCHLAEVWCGSERPVADNERMFDVLQRFSGQRNEVRFFL
RHERPPGRDIVSGPRSQDPSLKRNGVKVPGEYRRKENGVSFPRMDLTALAEQEMASRQQQIEAQQQLLATKEQRLKFLK
QQDQRQQQVAEQEKLRLEIAENQEAQLKKVRALKGHVEQKRLSNGKLVEEIEQMNNLFQQKQRELVLAVSKVEELTR
QLEMLKNGRIDSHHDNQSAVAELDRLYKELQLRNKLNOEQNAKLQQQRECLNKRNSEVAVMDKRVNELRDLWKKKAALQ
QKENLPVSSDGNLPQQAASAPSRVAAVGPYIQSSTMPRMPSPRPELLVKPALPDGSLVIOASEGPMKIQTLPNMRSGAASQ
TKGSKIHPVGPDWSPSNADLFPSQGSASVPQSTGNALDQVDDGEVPLREKEKKVRPFMSMFDVAVDQSNAPPSPFGTLRKNQS
SEDILRDAQVANKNVAKVPPVPTPKQINLPYFGQTNQPPSDIKPDGSSQQLSTVVPSMGTKPKPAGQQPRVLLSPSIP
SVGQDQTLSPGSKQESPPAAVRPFTFPQPSKDTLLPFFRKPTVAASSIYSMTQQQAPGKNFQQAVQSALTTKTHTRGPH
FSSVYGKPVIAAAQNNQHPENIYNSQGGKPGSPETEPVSSVQENHENERIPRPLSPTKLLPFLSNFYRNQSDADLEA
LRKKLSNAPRPLKKRSSITEPEGPNPNIQKLLYQRTTIAAMETISVPSYPSKSASVTASSESPVEIQNPYLHVEPEKEV
VSLVPESLSPEDVGNASTENSMDPAPSPGLDYEPEGVDPDENSENLQNNPBEENPEAPHVLDVYLEEYPPYPPPPYPSGEPE
GPGEDSVSMRPPFITGQVSLPPGKRTNLRKTGSERIAHGMRVKFNPLALLLDSSLEGEFDLVQRIIYEVDPSLPNDEGI
TALHNAVCAHTEIVKFLVQFGVNVNAADSDGWTPLHCAASCNNVQVCKFLVESGAAVFAMTYSDMQTAADKCEEMEEGY
TQCSQFLYGVQEKMGIMNKGVIALWDYEPQNDDELPMKEGDCMTI IHREDEDEIEWWWARLNDKEGYVPRNLLGLYPRI
KPRQRSIA

Figure 18a

ATGACGGAATATAAGCTGGTGGTGGTGGGCGCCGGCGGTGTGGGCAAGA
GTGCGCTGACCATCCAGCTGATCCAGAACCATTTTGTGGACGAATACGAC
CCCACTATAGAGGATTCTACCGGAAGCAGGTGGTCATTGATGGGGAGAC
GTGCCTGTTGGACATCCTGGATACCGCCGGCCAGGAGGAGTACAGCGCCA
TGCGGGACCAGTACATGCGCACCGGGGAGGGCTTCCTGTGTGTGTTTGCC
ATCAACAACACCAAGTCTTTTGAGGACATCCACCAGTACAGGGAGCAGAT
CAAACGGGTGAAGGACTCGGATGACGTGCCCATGGTGCTGGTGGGGAAC
AAGTGTGACCTGGCTGCACGCACTGTGGAATCTCGGCAGGCTCAGGACCT
CGCCCGAAGCTACGGCATCCCCTACATCGAGACCTCGGCCAAGACCCGGC
AGGGAGTGGAGGATGCCTTCTACACGTTGGTGCGTGAGATCCGGCAGCAC
AAGCTGCGGAAGCTGAACCCTCCTGATGAGAGTGGCCCCGGCTGCATGAG
CTGCAAGTGTGTGCTCTCCTGA

Figure 18b

MTEYKLVVVGAGGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCL
LDILD TAGQEEYSAMRDQYMRTGEGFLCVFAINNTKSFEDIHQYREQIKRVK
DSDDVPMVLVGNKCDLAARTVESRQAQDLARSYGIPYIETSAKTRQGVEDAF
YTLVREIRQHKLRKLNPPDESGPGCMSCKCVLS

Figure 18c

ATGACGGAATATAAGCTGGTGGTGGTGGGCGCCGTCGGTGTGGGCAAGA
GTGCGCTGACCATCCAGCTGATCCAGAACCATTTTGTGGACGAATACGAC
CCCACTATAGAGGATTCCTACCGGAAGCAGGTGGTCATTGATGGGGAGAC
GTGCCTGTTGGACATCCTGGATACCGCCGGCCAGGAGGAGTACAGCGCCA
TGCGGGACCAGTACATGCGCACCGGGGAGGGCTTCCTGTGTGTGTTTGCC
ATCAACAACACCAAGTCTTTTGAAGACATCCACCAGTACAGGGAGCAGAT
CAAACGGGTGAAGGACTCGGATGACGTGCCCATGGTGCTGGTGGGGAAC
AAGTGTGACCTGGCTGCACGCACTGTGGAATCTCGGCAGGCTCAGGACCT
CGCCCGAAGCTACGGCATCCCCTACATCGAGACCTCGGCCAAGACCCGGC
AGGGAGTGGAGGATGCCTTCTACACGTTGGTGCGTGAGATCCGGCAGCAC
AAGCTGCGGAAGCTGAACCCTCCTGATGAGAGTGGCCCCGGCTGCATGAG
CTGCAAGTGTGTGCTCTCCTGA

Figure 18d

MTEYKLVVVGAVGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCL
LDILDTAGQEEYSAMRDQYMRTGEGFLCVFAINNTKSFEDIHQYREQIKRVK
DSDDVPMVLVGNKCDLAARTVESRQAQDLARSYGIPYIETSAKTRQGVEDAF
YTLVREIRQHKLRKLNPPDESGPGCMSCKCVLS-

Figure 18e

ATGACTGAATATAAACTTGTGGTAGTTGGAGCTGGTGGCGTAGGCAAGAG
TGCCTTGACGATACAGCTAATTCAGAATCATTTTGTGGACGAATATGATCC
AACAATAGAGGATTCCTACAGGAAGCAAGTAGTAATTGATGGAGAAACC
TGTCTCTTGGATATTCTCGACACAGCAGGTCAAGAGGAGTACAGTGCAAT
GAGGGACCAGTACATGAGGACTGGGGAGGGCTTTCTTTGTGTATTTGCCA
TAAATAATACTAAATCATTTGAAGATATTCACCATTATAGAGAACAAATT
AAAAGAGTTAAGGACTCTGAAGATGTACCTATGGTCCTAGTAGGAAATAA
ATGTGATTTGCCTTCTAGAACAGTAGACACAAAACAGGCTCAGGACTTAG
CAAGAAGTTATGGAATTCCTTTTATTGAAACATCAGCAAAGACAAGACAG
GGTGTGATGATGCCTTCTATACATTAGTTTCGAGAAATTCGAAAACATAA
AGAAAAGATGAGCAAAGATGGTAAAAAGAAGAAAAAGAAGTCAAAGAC
AAAGTGTGTAATTATGTAA

Figure 18f

MTEYKLVVVGAGGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCL
LDILDTAGQEEYSAMRDQYMRTGEGFLCVFAINNTKSFEDIHHYREQIKRVK
DSEDVPMVLVGNKCDLPSRTVDTKQAQDLARSYGIPFIETSAKTRQGVDDAF
YTLVREIRKHKEKMSKDGKKKKKKSKTKCVIM-

Figure 18g

ATGACTGAATATAAACTTGTGGTAGTTGGAGCTGTCGGCGTAGGCAAGAG
TGCCTTGACGATACAGCTAATTCAGAATCATTTTGTGGACGAATATGATCC
AACAATAGAGGATTCTACAGGAAGCAAGTAGTAATTGATGGAGAAACC
TGTCTCTTGGATATTCTCGACACAGCAGGTCAAGAGGAGTACAGTGCAAT
GAGGGACCAGTACATGAGGACTGGGGAGGGCTTTCTTTGTGTATTTGCCA
TAAATAATACTAAATCATTTGAAGATATTCACCATTATAGAGAACAAATT
AAAAGAGTTAAGGACTCTGAAGATGTACCTATGGTCCTAGTAGGAAATAA
ATGTGATTTGCCTTCTAGAACAGTAGACACAAAACAGGCTCAGGACTTAG
CAAGAAGTTATGGAATTCCTTTTATTGAAACATCAGCAAAGACAAGACAG
GGTGTTGATGATGCCTTCTATACATTAGTTTCGAGAAATTCGAAAACATAA
AGAAAAGATGAGCAAAGATGGTAAAAAGAAGAAAAAGAAGTCAAAGAC
AAAGTGTGTAATTATGTAA

Figure 18h

MTEYKLVVVGAVGVGKSALTIQLIQNHFVDEYDPTIEDSYRKQVVIDGETCL
LDILDTAGQEEYSAMRDQYMRTGEGFLCVFAINNTKSFEDIHHYREQIKRVK
DSEDVPMVLVGNKCDLPSRTVDTKQAQDLARSYGIPFIETSAKTRQGVDDAF
YTLVREIRKHKEKMSKDGKKKKKKSKTKCVIM-

Figure 19a

```
atggcgccggc cggcgccggc gggcgccggc cgggagatgg tccgccccca ggtgttcgac
gtggggccgc gctacaccaa cctctcgtac atcggcgagg gcgcctacgg catggtgtgc
tctgcttatg ataatgtcaa caaagttcga gtagctatca agaaaatcag cccctttgag
caccagacct actgccagag aaccctgagg gagataaaaa tcttactgcg cttcagacat
gagaacatca ttggaatcaa tgacattatt cgagcaccaa ccatcgagca aatgaaagat
gtatatatag tacaggacct catggaaaca gatctttaca agctcttgaa gacacaacac
ctcagcaatg accatatctg ctatcttctc taccagatcc tcagaggggt aaaatatatc
cattcagcta acgttctgca ccgtgacctc aagccttcca acctgctgct caacaccacc
tgtgatctca agatctgtga ctttggcctg gcccggtgtg cagatccaga ccatgatcac
acagggttcc tgacagaata tgtggccaca cgttggtaca gggctccaga aattatgttg
aattccaagg gctacaccaa gtccattgat atttggtctg taggctgcat tctggcagaa
atgctttcta acaggcccat ctttccaggg aagcattatc ttgaccagct gaaacacatt
ttgggtattc ttggatcccc atcacaagaa gacctgaatt gtataataaa tttaaaagct
aggaactatt tgctttctct tccacacaaa aataagggtc catggaacag gctgttccca
aatgctgact ccaaagctct ggacttattg gacaaaatgt tgacattcaa cccacacaag
aggattgaag tagaacaggc tctggcccac ccatatctgg agcagtatta cgacccgagt
gacgagccca tcgccgaagc accattcaag ttcgacatgg aattggatga cttgcctaag
gaaaagctca aagaactaat ttttgaagag actgctagat tccagccagg atacagatct
taa
```

Figure 19b

```
MAAAAAAGAGPEMVRGQVFDVGPRTYTNLSYIGEGAYGMVCSAYDNVNKVRV
AIKKISPFHQTYCQRTLREIKILLRFRHENIIGINDIIRAPTIEQMKDVYTVQDLME
TDLYKLLKTQHLSNDHICYFLYQILRGLKYIHSANVLHRDLKPSNLLLNTTCDLKI
CDFGLARVADPDHDHTGFLTEYVATRWRAP EIMLNSKGYTKSIDIWSVGCILA
EMLSNRPIFP GKHYLDQLKHILGILGSPSQEDLNCIINLKARNYLLSLPHKNKVPW
NRLFPNADSKALDLLDKMLTFNPHKRIEVEQALAH PYLEQYYDPSDEPIAEAPFK
FDMELDDL PKEKLKELIFEETARFQPGYRS
```

Figure 20a

```

1  tcgggctgag gttcccgggc gggcgggcgc ggagagacgc ggggaagcagg ggctgggagg
61  gggtcgcgcc gccgcagcta gcgcagccag cccgagggcc gccgccgcgc cgcgccagcg
121 cgctccgggg ccgccggccc cagccagcac ccgccgcgcc gcagctccgg gaccggcccc
181 gggcgccgcc gccgcgatgg gcaacgccgc cggcgccaag aagggcagcg agcaggagag
241 cgtgaaagaa ttcttagcca aagccaaaga agattttctt aaaaaatggg aaagtcccgc
301 tcagaacaca gccacttggg atcagtttga acgaatcaag accctcggca cgggctcctt
361 cgggcgggtg atgctggtga aacacaagga gaccgggaac cactatgcca tgaagatcct
421 cgacaaacag aaggtggtga aactgaaaca gatcgaacac accctgaatg aaaagcgcat
481 cctgcaagct gtcaactttc cgttcctcgt caaactcgag ttctccttca aggacaactc
541 aaacttatac atggtcatgg agtacgtgcc cggcggggag atgttctcac acctacggcg
601 gatcggaagg ttcatgtgag cccatgcccg tttctacgcy gccagatcg tcctgacctt
661 tgagtatctg cactcgctgg atctcatcta cagggaacctg aagcgggaga atctgctcat
721 tgaccagcag ggctacattc aggtgacaga cttcggtttc gccaaagcgc tgaaggggcg
781 cacttggaac ttgtgaggca cccctgagta cctggccctt gagattatcc tgagcaaagg
841 ctacaacaag gccgtggact ggtgggccc cgggggttctt atctatgaaa tggccgctgg
901 ctaccgcgcc ttcttcgcag accagcccat ccagatctat gagaagatcg tctctgggaa
961 ggtgcgcttc ccttccact tcagctctga cttgaaggac ctgctgcgga acctcctgca
1021 ggtagatctc accaagcgct ttgggaacct caagaatggg gtcaacgata tcaagaacca
1081 caagtgtgtt gccacaactg actggattgc catctaccag aggaagggtg aaagtccctt
1141 cataccaaag tttaaaggcc ctggggatac gagtaacttt gacgactatg aggaagaaga
1201 aatccgggtc tccatcaatg agaagtgtgg caaggagttt tctgagtttt aggggcatgc
1261 ctgtgcccc atgggttttc ttttttctt tttcttttt ttggtcgggg ggggtgggag
1321 gttggattga acagccagag ggcccagag ttcttgcac ctaatttcac cccacccca
1381 ccctccaggg ttagggggag cagggaagccc agataatcag agggacagaa acaccagctg
1441 ctccccctca tccccctcac cctcctgccc cctctccac ttttccctt ctctttcccc
1501 acagccccc agccctcag ccctcccagc ccacttctgc ctgtttttaa cgagtttctc
1561 aactccagtc agaccaggtc ttgctggtgt atccaggga agggatgga aagaggggct
1621 cagcttaac tccagcccc acccacacc ccattccacc caaccacagg cccacttgc
1681 taaggggaaa tgaacgaagc gccaaccttc ctttcggagt aatcctgctt ggggaaggaga
1741 gatttttagt gacatgttca gtgggttgct tgctagaatt tttttaaaaa aacaacaatt
1801 taaaatctta ttaaagttcc accagtgcct ccctccctcc ttcctctact cccaccctc
1861 ccatgtcccc ccattcctca aatccatttt aaagagaagc agactgactt tggaaagggg
1921 ggcgtgggg tttgaacctc ccgctgcta atctcccctg ggccctccc cggggaatcc
1981 tctctgcaa tcttgcgagg gtctaggccc ctttaggaag cctccgctct ctttttcccc
2041 aacagacctg tottaccct tgggctttga aagccagaca aagcagctgc cctctccct
2101 gccaaagagg agtcatcccc caaaaagaca gagggggagc cccaagccca agtctttcct
2161 cccagcagcg tttccccca actccttaat tttattctcc gctagatttt aacgtccagc
2221 cttccctcag ctgagtgggg agggcatccc tgcaaaaggg aacagaagag gccaaagtcc
2281 cccaagccac ggcccggggt tcaaggctag agctgctggg gaggggctgc ctgttttact
2341 caccaccag cttccgcctc ccccatcctg ggcgccctc ctccagctta gctgtcagct
2401 gtccatcacc tctccccac tttctcattt gtgcttttt ctctcgtaat agaaaagtgg
2461 ggagccgctg gggagccacc ccattcatcc cgtatttcc ccctctcata acttctccc
2521 atcccaggag gagttctcag gcctgggggtg gggcccccgg tgggtgcggg ggcgattcaa
2581 cctgtgtgct gcgaaggacg agacttctc ttgaacagtg tgctgttgta aacatatttg
2641 aaaactatta ccaataaagt tttgttttaa aaaaaaaaaa aaaaa

```

Figure 20b

```

MGNAAAANKGSEQESVKEFLAKAKEDFLKKWESPAQNTAHL DQFERIKTLGTGSFGRVMLVKHKETGNHY
AMKILDKQKVVKLKQIEHTLNEKRILQAVNFPFLVKLEFSFKDNSNLYMMEYVPGGEMFSLRRIGRFS
EPHARFYAAQIVLTFEYLSLDLIYRDLKPENLLIDQQGYIQVTDGFGAKRVKGRWTLCGTPEYLAPEI
ILSKGYNKAVDWWALGVLIYEMAAGYPFFADQPIQIYEKIVSGKVRFP SHFSSDLKDLLRNLLQVDLTK
RFGNLKNGVNDIKNHKWFATTDWIAIYQRKVEAPFIPKFKGPGDTSNFDDEEEIIRV SINEKCGKEFSE
F

```

Figure 21a

ATGTCCGACAGCGAGAAGCTCAACCTGGACTCGATCATCGGGCGCCTGCT
GGAAGTGCAGGGCTCGCGGCCTGGCAAGAATGTACAGCTGACAGAGAAC
GAGATCCGCGGTCTGTGCCTGAAATCCCGGGAGATTTTTCTGAGCCAGCC
CATTCTTCTGGAGCTGGAGGCACCCCTCAAGATCTGCGGTGACATACACG
GCCAGTACTACGACCTTCTGCGACTATTTGAGTATGGCGGTTTCCCTCCCG
AGAGCAACTACCTCTTTCTGGGGGACTATGTGGACAGGGGCAAGCAGTCC
TTGGAGACCATCTGCCTGCTGCTGGCCTATAAGATCAAGTACCCCGAGAA
CTTCTTCTGCTCCGTGGGAACCACGAGTGTGCCAGCATCAACCGCATCTA
TGGTTTCTACGATGAGTGCAAGAGACGCTACAACATCAAACCTGTGGAAAA
CCTTCACTGACTGCTTCAACTGCCTGCCCATCGCGGCCATAGTGGACGAA
AAGATCTTCTGCTGCCACGGAGGCCTGTCCCCGGACCTGCAGTCTATGGA
GCAGATTCGGCGGATCATGCGGCCCCACAGATGTGCCTGACCAGGGCCTGC
TGTGTGACCTGCTGTGGTCTGACCCTGACAAGGACGTGCAGGGGCTGGGGC
GAGAACGACCGTGGCGTCTCTTTTACCTTTGGAGCCGAGGTGGTGGCCAA
GTTCTCCACAAGCAGACTTGGACCTCATCTGCCGAGCACACCAGGTGG
TAGAAGACGGCTACGAGTTCTTTGCCAAGCGGCAGCTGGTGACACTTTTC
TCAGTCCCAACTACTGTGGCGAGTTTGACAATGCTGGCGCCATGATGAG
TGTGGACGAGACCCTCATGTGCTCTTTCCAGATCCTCAAGCCCGCCGACA
AGAACAAGGGGAAGTACGGGCAGTTCAGTGGCCTGAACCCTGGAGGCCG
ACCCATCACCCACCCCGCAATTCCGCCAAAGCCAAGAAATAG

Figure 21b

MSDSEKLNLDSEIIGRLLEVQGS RPGKNVQLTENEIRGLCLKSREIFLSQPILLEL
EAPLKICGDIHGQYYDLLRLFEGGFPPESNYLFLGDYVDRGKQSLETICLLL
AYKIKYPENFFLLRGNHECASINRIYGFYDECKRRYNIKLWKTFTDCFNCLPIA
AIVDEKIFCCHGGLSPDLQSMEQIRRM RPTDVPDQGLLCDLLWSDPDKDVQ
GWGENDRGVSF TF GA EVVAKFLHKHDLDLICRAHQVVEDGYEFFAKRQLVT
LFSAPNYCGEFDNAGAMMSVDETL MCSFQILKPADKNKGKYGQFSGLNPGG
RPITPPRNSAKAKK

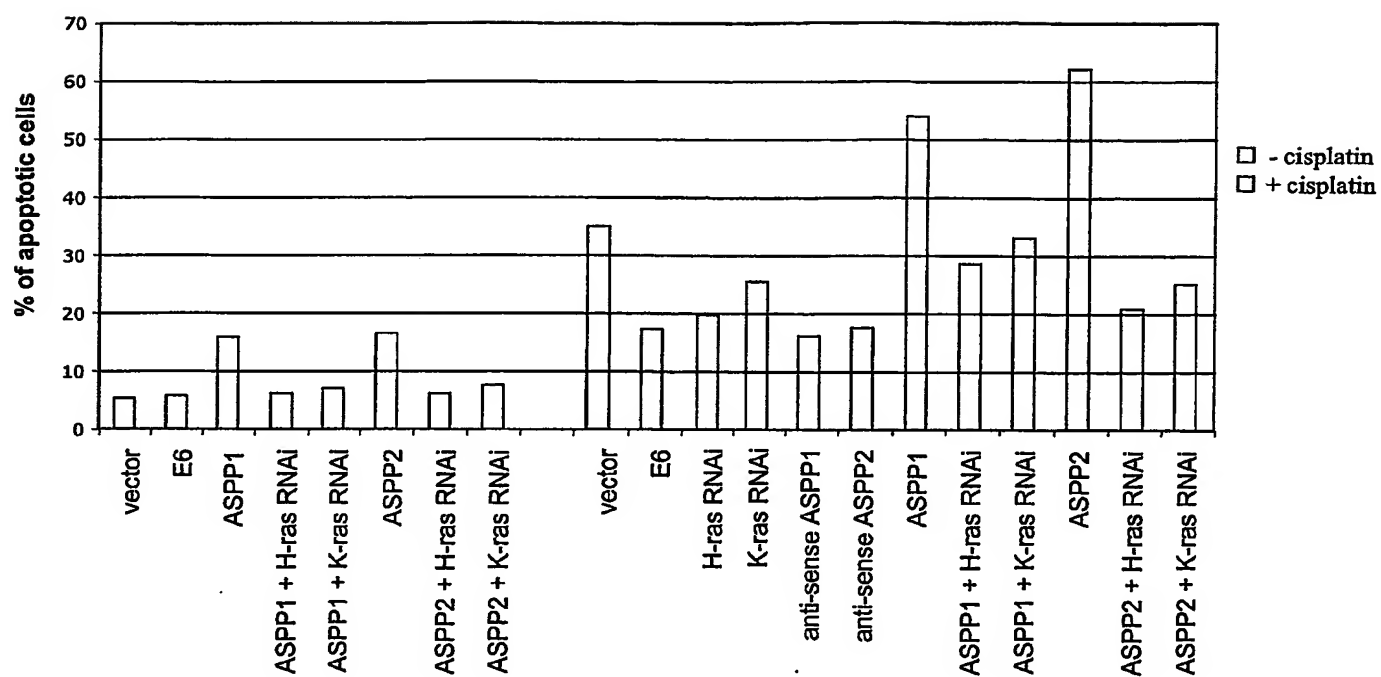
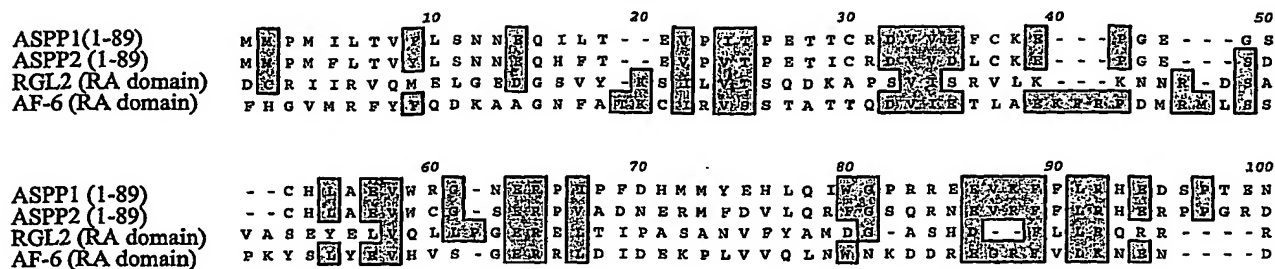
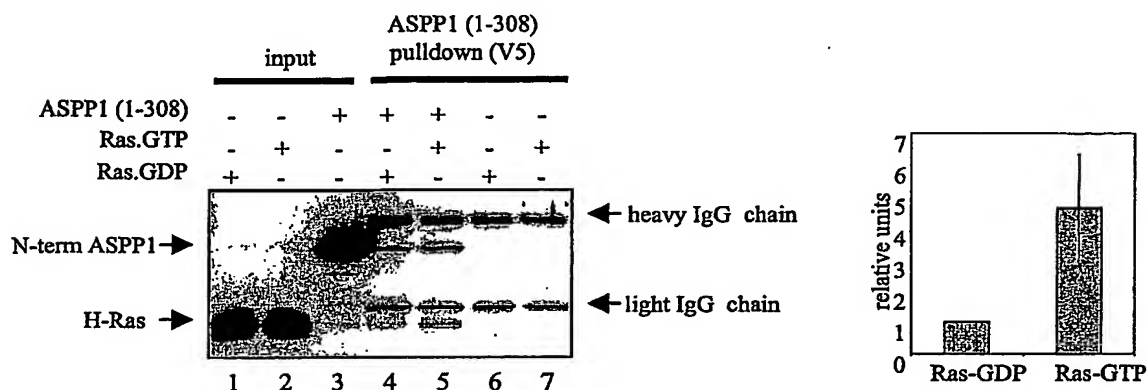


Figure 22

45
A

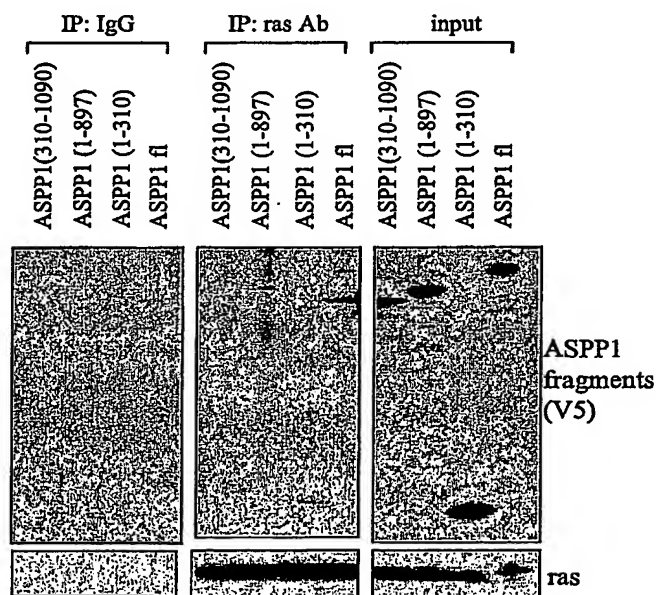


23
B

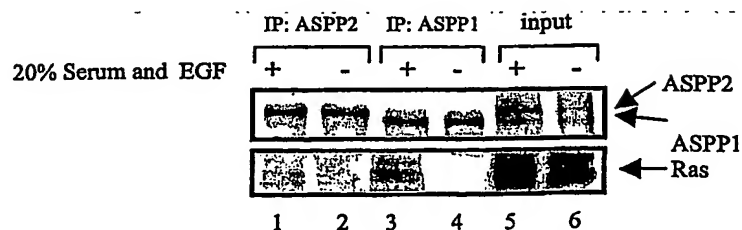


23
C

	RAD	Contains RAD
ASPP1 fl	1 143 310 897 1090	+
ASPP1 (1-310)		+
ASPP1 (1-897)		+
ASPP1 (310-1090)		-

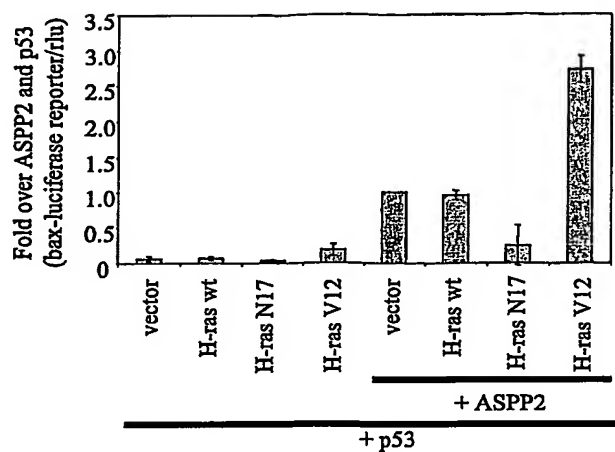


23
D



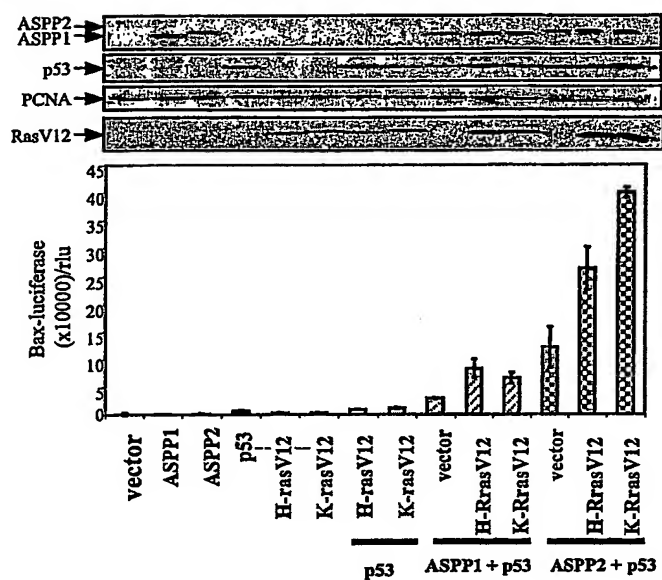
24

A

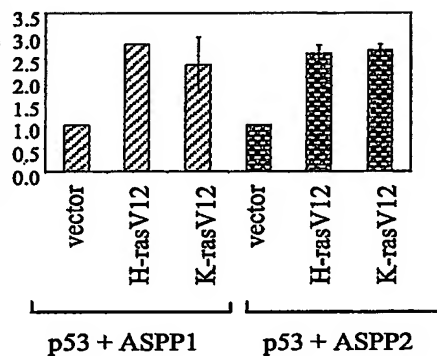


24

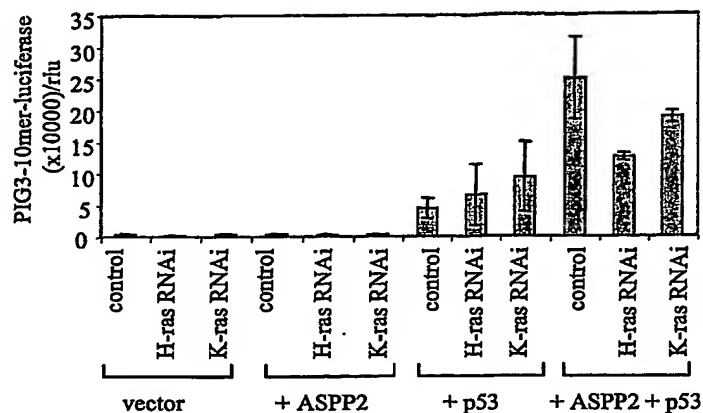
B



fold over p53 + ASP1/2 (bax-luciferase reporter)

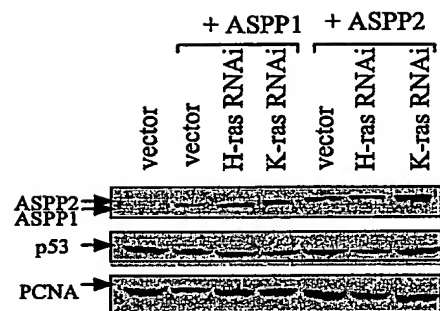
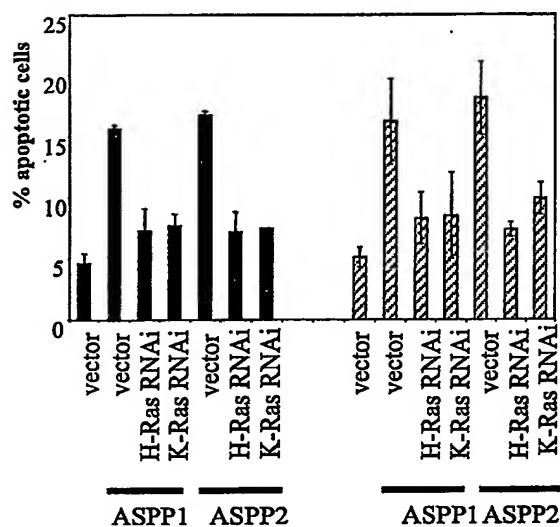


A



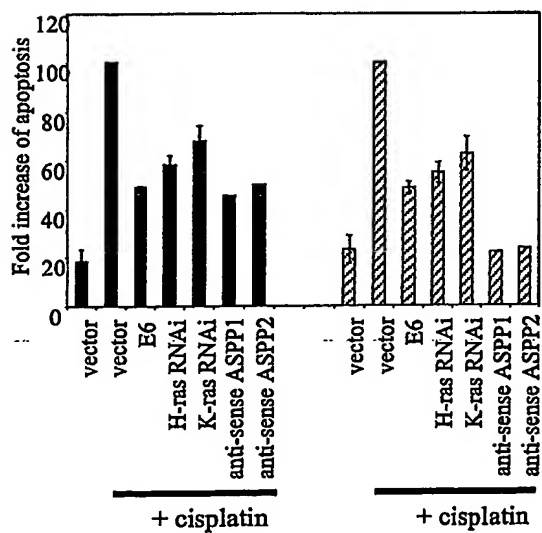
25

B

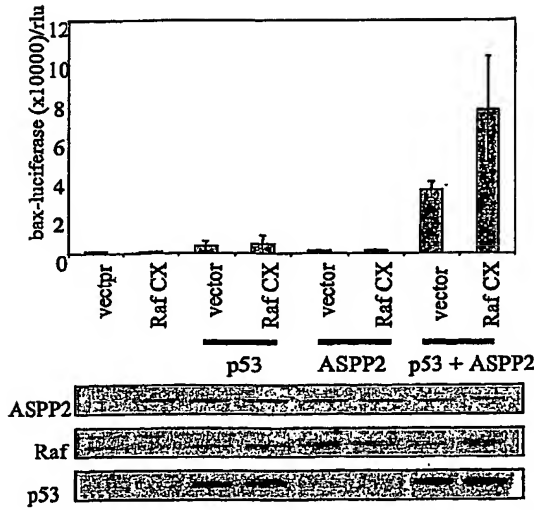


25

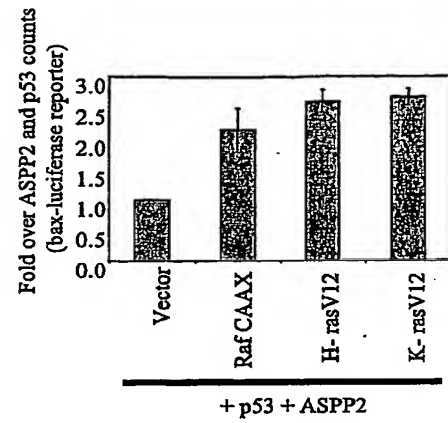
C



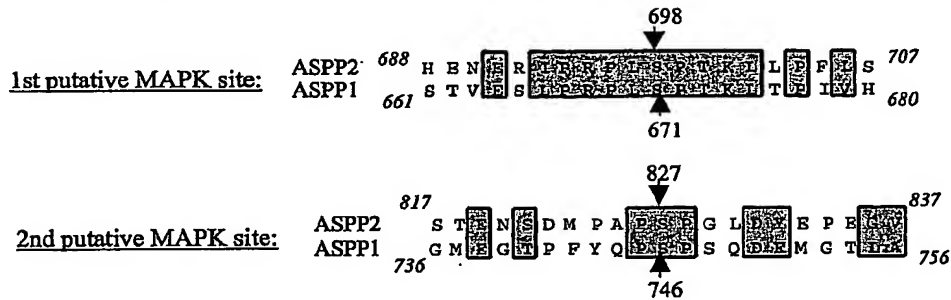
26
A



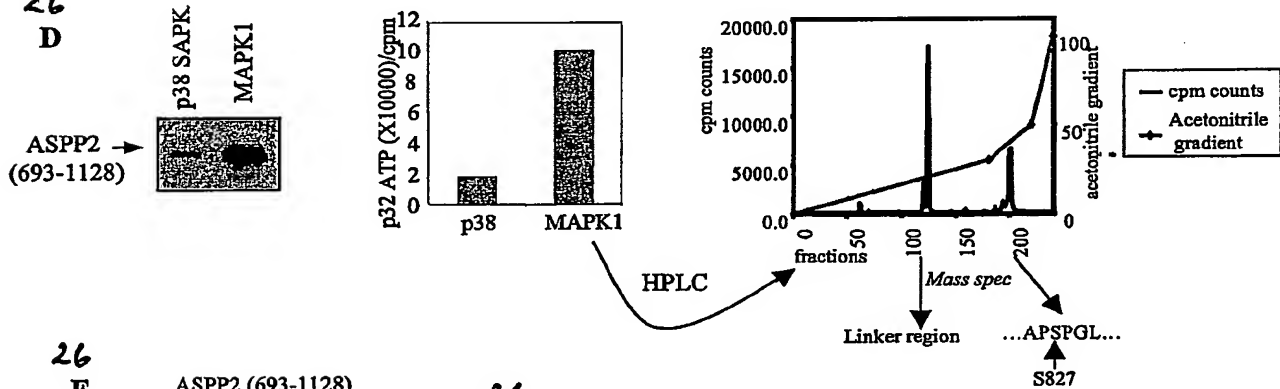
26
B



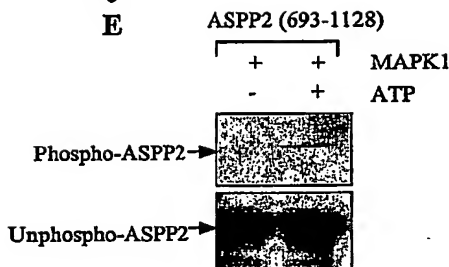
26
C



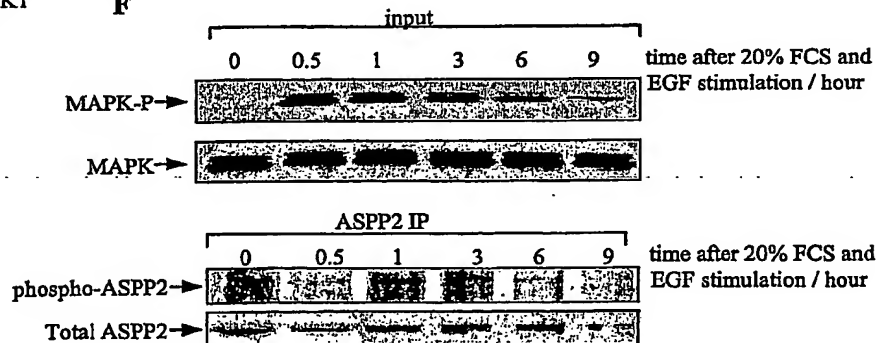
26
D



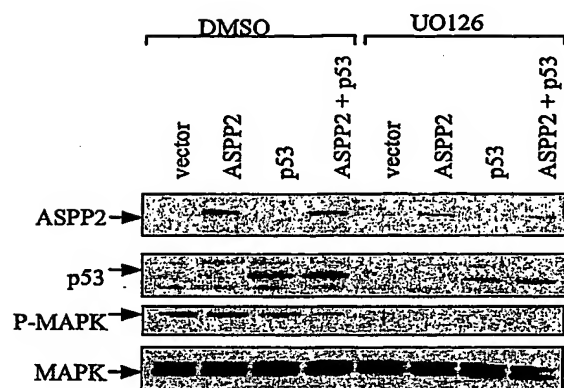
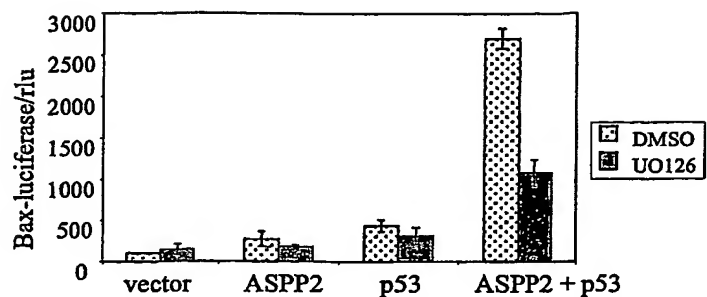
26
E



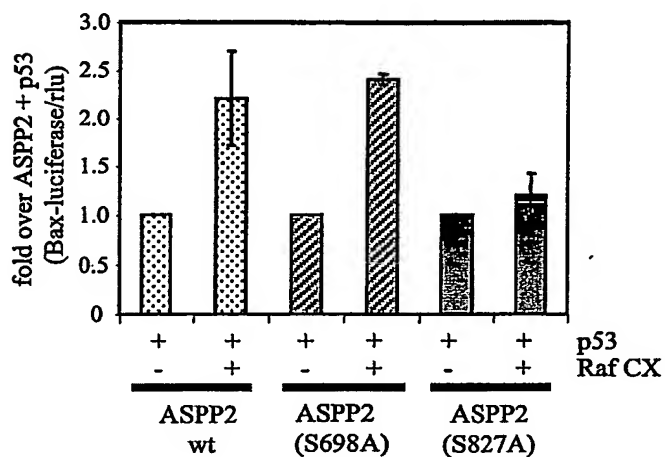
26
F



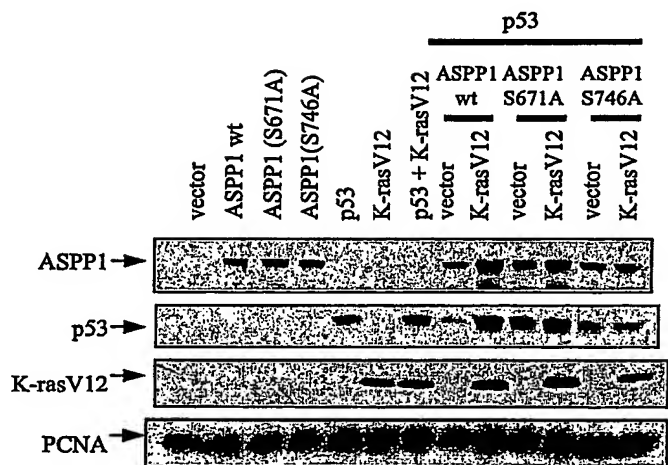
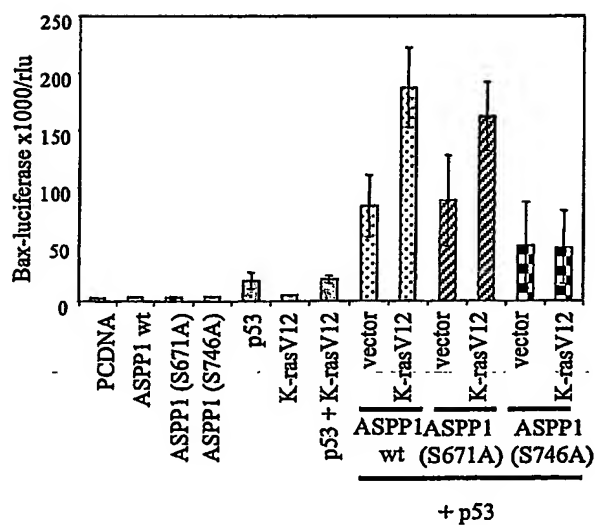
27
A



27
B

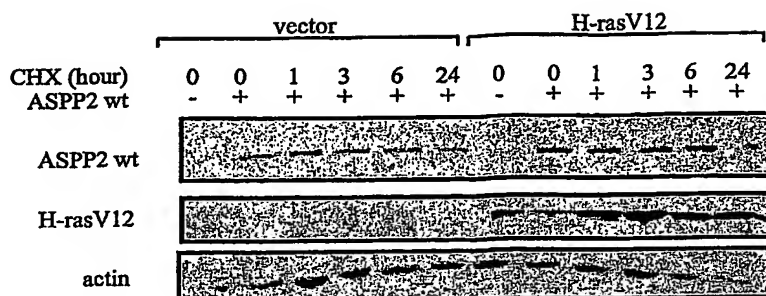


27
C



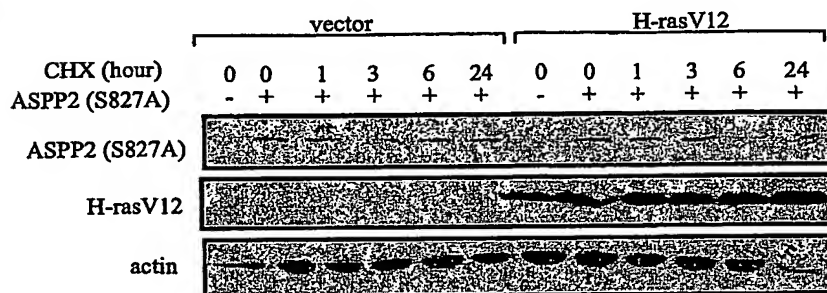
28

A



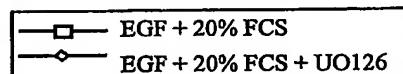
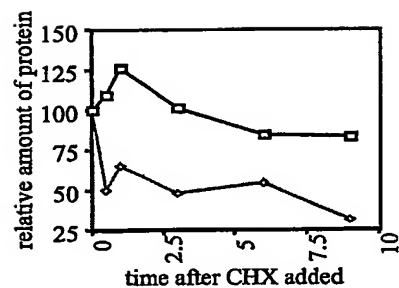
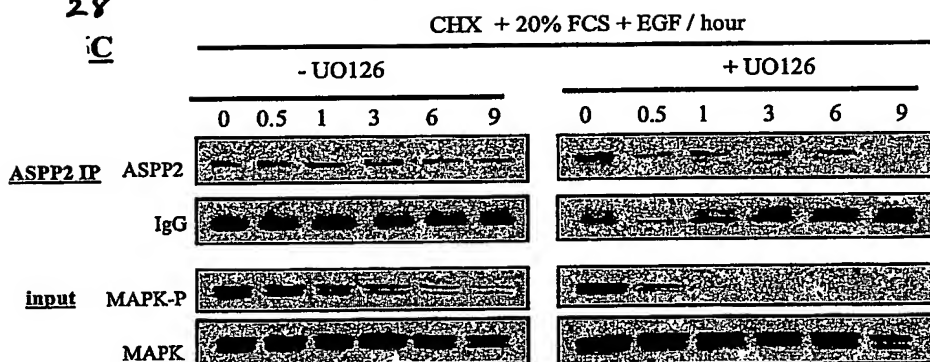
28

B



28

C



28

D

